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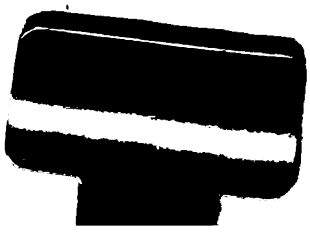

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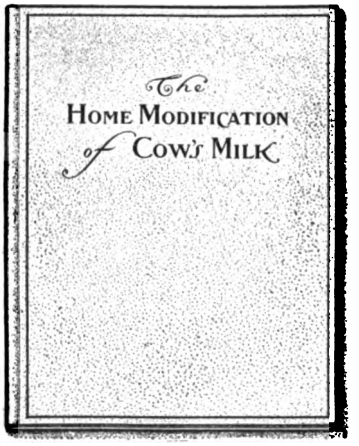

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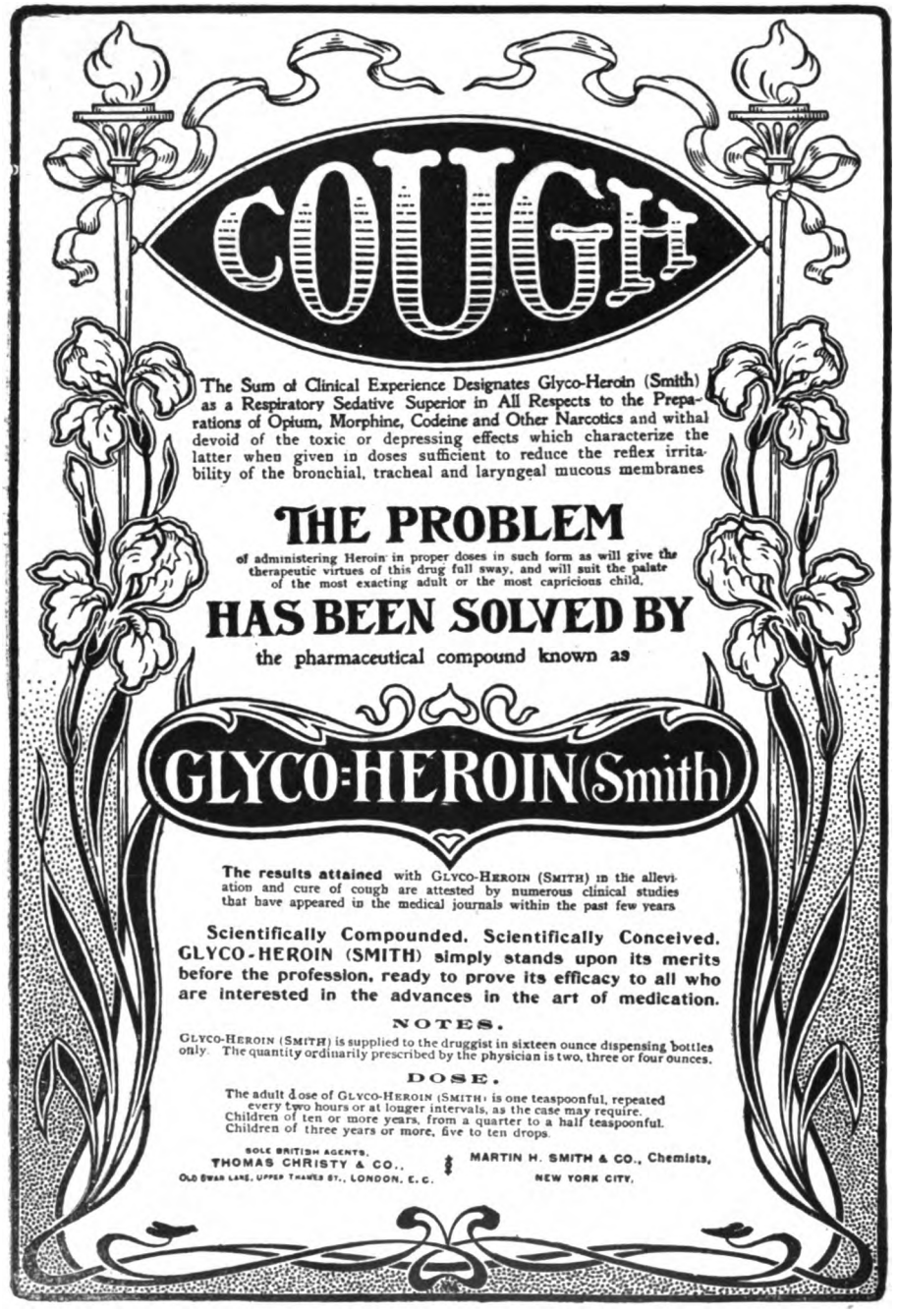
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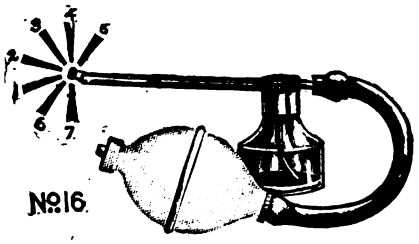

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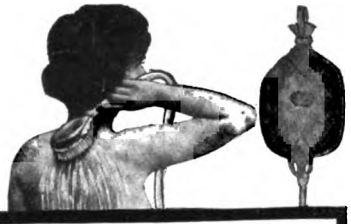

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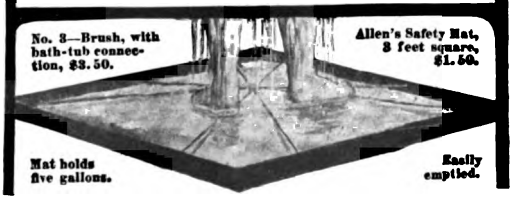

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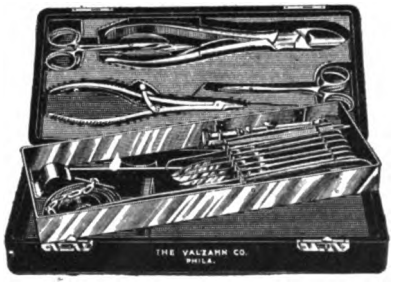

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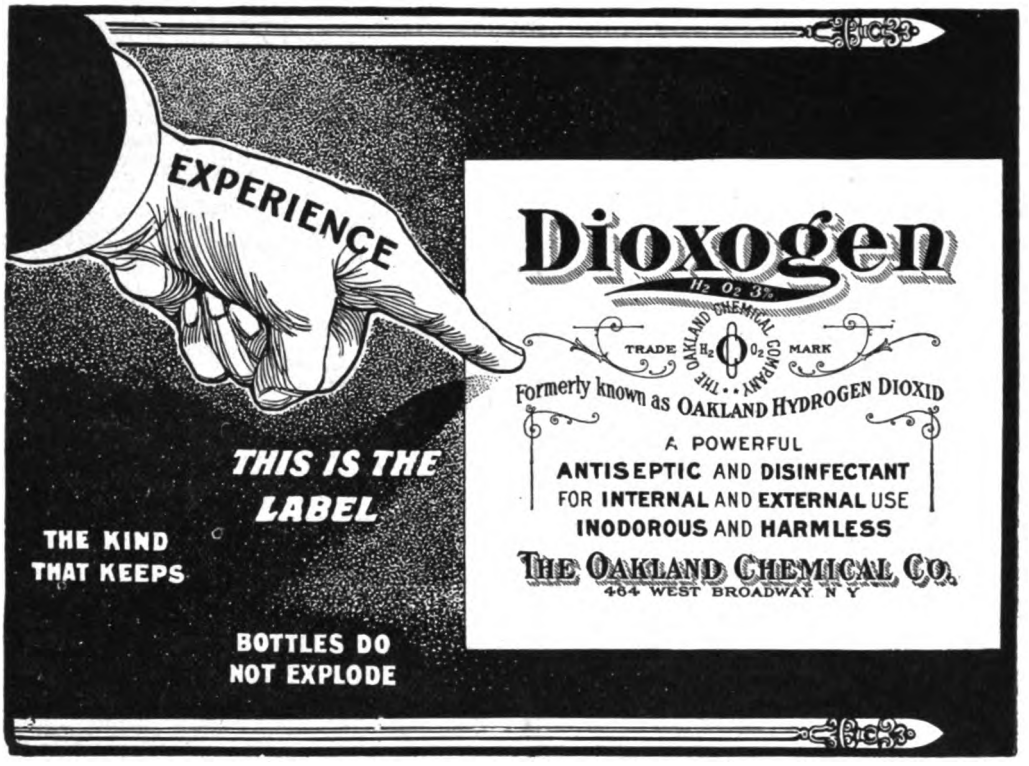

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EDITORIAL ABSTRACTS.

BIG ENDOWMENTS.

The *Philadelphia Medical Journal,* March 21, views with concern the establishment of the great new institutes for scientific research, fearing they will take the best men away from the medical schools and profession. Research work has been done mainly by men in close touch with the medical practitioner, demanding results. The successful laboratory worker has never got very far away from the body of the profession.

With the establishment of the Carnegie and Rockefeller institutes things have changed. The pure scientist can now return to a cell where he can cogitate and experiment undisturbed by the clamors of the class room or the practitioner.

Medical science should be made available. It must be practical and adapted to its ends by men who are thoroughly in sympathy with those ends. To do this it must have a clinical field as well as a laboratory, and its findings must be made intelligible by men who are in constant touch with its practitioners.

NATURE'S CURE OF ASIATIC CHOLERA.

Dr. W. B. McLaughlin, of Austin, Texas, a returned medical officer in the Philippines, contributes an interesting article under the above head in the April *Texas Medical Journal.* As a result of his observation and study, the doctor notes "that cholera is a disease accompanied, as a rule, by vomiting, purging and a rise of from 2 to 5 degrees of the internal bodily temperature, and that it terminates in one of three ways: By direct convalescence; by a febrile reaction, or by death from collapse.

"Admitting the above observation as true, it seems to me that the conservative efforts of nature are directed to ridding the organism of the vibrio, by the vomiting and purging, and if the infection is so severe that she cannot accomplish the object by this alone, she raises the bodily temperature to a point when the growth of the vibrio is interfered with, or even inhibited. Unfortunately, both the diarrhea and the fever are a severe tax on the vitality of the patient,

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and he frequently succumbs from collapse, or the febrile process, once started, refuses to be controlled, and he dies from hyperpyrexia.

"In most of the infectious or contagious diseases, it is now believed that they are limited as to the time of their duration, by the formation of an antitoxine which inhibits their growth, and the best efforts of many modern investigators have been directed toward the isolation of these antitoxines, so that, by their administration, we might bring about an artificial crisis in the disease, many days in advance of the time required by nature to accomplish the same object. In this manner the patient is saved days of suffering and danger.

"In my opinion, heat in cholera is the analogue of Behring's antitoxin in diphtheria, and that by causing an early rise in temperature in cholera patients, we can render the disease one of an extremely low mortality.

"Remembering the experiments of Martin and Han, in which, by giving an enema, to a healthy adult, of water at a temperature of 115 degrees, the temperature of the person was raised 5 degrees in 25 minutes, I determined to adopt this method of raising the body temperature on account of the auxiliary advantage in flushing out the colon thoroughly. I used a normal salt solution of 112 degrees, and passed from one to two quarts above the sigmoid flexure. In all I used this treatment on five cases.

"The first case was in a state of extreme collapse at the time the injection was given, and died within the hour without any sign of reaction.

"The second case died within ten hours with hyperpyrexia.

"After this the temperature was reduced to 110 degrees, and an ice bag was applied to the patient's head during its administration. The three remaining cases made good convalescence, entering the stage of reaction, in each case, within an hour of the administration of the injection.

"I am aware that these observations are incomplete, and imperfect, but illness compelled me to leave the Philippines at this time, and I had no opportunity to give this method further trial. I therefore submit this article as it is, hoping that the ideas outlined herein may be of value in the treatment of this terrible disease."

IMPORTANCE OF THE VASOMOTOR SYSTEM AS A FACTOR IN DISEASE.

In the *Therapeutic Gazette* of March, Dr. H. A. Hare writes on the above subject and takes the position that in many cases of supposed cardiac failure the heart is really not at fault, but the blood vessels being relaxed, stasis of the blood occurs in the capilliaries and the patient is practically bled to death into his own blood vessels, so that the heart fails, because it could not get blood enough to fill its own arteries. Hence, the importance of giving close attention to the vaso-motar system in all cases of illness when the circulation seems to be failing. Dr. Crile, of Cleveland, has made some very valuable observations on the vaso-motor system in surgical conditions. Curtis' experiments may be considered as amplifications of the views of the writers; also H. C. Wood and Leonard Hill, of London, who showed that pressure upon the great abdominal vessels was a valuable measure for the maintenance of arterial tension in shock. In this condition strychnine, digitalis and alcohol stimulate the heart, but the real need is a stimulant of the vaso-motor system, and to provide support for the blood vessels in the extrem-

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ities so that the circulation may be carried out satisfactorily in vital portions of the body.

Grile has found that the restoration of what might be called the approximate normal blood pressure can be effected by adrenalin, which at the same time restores the activity of the heart muscle. He recommends that adrenalin be given often and in minute dose, as it is quickly oxidized by the blood and is comparatively fleeting in its influence unless the dose be frequently repeated.

THE DOCTOR'S BILLS.

In the *Medical Mirror*, January, Dr. Robt. T. Morris discourses instructively concerning a matter of the greatest interest to the medical practitioner, that of his bills. It is a sad, but well known fact that no profession suffers as does the medical in the matter of receiving adequate payment for services rendered, and the doctor is almost always the last to be paid. Dr. Morris points out that a man, in order to be well qualified to fulfill the duties of a physician or surgeon, must gain the requisite knowledge at great expense, and not only this, but when in practice he must keep himself *au courant* with the latest discoveries, new modes of operation or treatment and most recent literature pertaining to his profession. The life of a successful medical man is an arduous one, and calls for a continual drain upon his mental and physical resources, as well as upon his pocket. To lead such a strenuous existence—even if he be of iron constitution—he needs a vacation of at least two months in the year. When at home, too, he must live in good style, dress well, and in all respects sustain the dignity of his calling. It therefore is a self evident fact that the doctor should be well remunerated, and thus his bills should be paid promptly.

The majority of medical men, however, if asked would undoubtedly say that the money due to them does not come in so rapidly as they could wish. Dr. Morris places his finger on one of the weak spots in a doctor's make-up when he refers to leniency in charges and carelessness in collecting bills, and demonstrates the fallacy of so doing. His patients understand his motives, and can classify him accurately. In the writer's own words: "If he is too lenient in making charges and too slack about collecting bills, they understand that he is not putting himself in position to render them the very best sort of service, because they know that he cannot prepare himself for rendering the best service. If the doctor prepares himself for giving large services in a large way, he is at once in demand by the sort of people who are in the habit of making use of that sort of service in their lawyers and engineers." As to the charging of large fees, Dr. Morris thinks that such a procedure is quite right when the patient has received from the treatment beneficial effects, which has, perhaps, enabled him to continue in the control of a large business to his consequent great pecuniary advantage. If a rich man calls in a well-known physician he must expect to pay as much for the expert knowledge in safeguarding his health as he would to a lawyer for assisting him to advance his material interests.

Dr. Morris concludes as follows:

"While the conditions in the smaller towns are different from those in the cities, the principles remain the same, and the physician who has expensively prepared himself for good work, or who out of experience has developed into a skilful physician, has a right to ask for compensation freely and promptly, without in the least including any mercenary

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motives. His bills should be regularly sent out at least once a month, and if not paid by the end of the third month go to the collector, unless the patient states a reason why such a business proceeding should not be applied in his case. If the reason is a good one, there are very few physicians indeed who cannot be depended upon to respect it, and to make the most kindly and generous disposition of the account. The important thing is to bring the matter to a business point in a business way at an early date, in order to give the doctor opportunity to be kind to his patient or just to himself."—*Med. Record.*

We wish to solicit from our readers, reports of unusual or interesting cases, too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

MISCELLANEOUS.

Nuggets From Georgia.—De rainy day is a time fer a man ter stay home en thank God de bill collector can't git out.

Folks what all time callin' fer fire in dis worl' will be de very ones what'll do de loudes' hollerin' fer ice hereafter.

W'en de cow kicks de milk over, stidder beatin' de cow, de wise man turns her out ter graze, en consoles hisse'f by sayin' dat milk ain't healthy, nohow.

Dey calls dis worl' a howlin' wilderness, en yit dey can't lay holt er a man silent enough ter draw a sal'ry in a sideshow!

I don't study 'bout de question er how many days hit took ter make de worl'; de leadin' question wid me is how many days will I be in it?—*Atlanta Constitution.*

Divine Right.—The New York *Times* tells this story of George F. Baer:

One evening during the strike the president of the Reading Railroad was homeward bound in a street car, when a fellow passenger who had a little clearing and a lot of woodland up on the mountain began to expound his theory that as coal was one of nature's gifts, the public had a right to help itself to anthracite.

Mr. Baer listened patiently to the harangue, and said quietly:

"That's a good idea, Mr. ————. I am short of wood, and I'll just send a man up to your place to cut a few cords for me. Trees are nature's gifts, you know."

Don't forget the meeting of the North Carolina Medical Society at Hot Springs on June 2d. Hot Springs, lovely at all times, will be simply charming at that season, as the mountain scenery is then at its best. The Hot Springs people, too, know how to entertain. Be there, doctors, without fail.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

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The Carolina Medical Journal

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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

The Complications of Appendicitis.

By H. A. Royster, A. B., M. D., Raleigh, N. C., Professor of Gynecology, Medical Department University of North Carolina; Gynecologist to Rex Hospital; Surgeon in Charge of St. Agnes' Hospital; Local Surgeon to Southern Railway.

It would be considered an act of presumption for any abdominal surgeon at this day merely to present cases illustrating large numbers of operations on the vermiform appendix. For these operations are being done so frequently over the whole world and with such a low mortality in many hands, as to cause no unusual comment. In fact, removal of the appendix in simple cases, either during or between attacks, is perhaps the easiest operation in the abdominal cavity. Barring accidents and a faulty technique, which is the unpardonable sin, none of the interval cases should be lost, and practically all of the acute ones ought to be saved if operated upon early.

However, it is not my purpose here to discuss the mortality or the treatment of appendicitis, but rather to point out certain complications of the disease, with the intention of elucidating some difficulties in their diagnosis and management. Incidentally, I shall describe a few unique cases which have occurred in my own experience, believing it will be profitable to notice some of the rarer conditions not ordinarily mentioned by the authorities.

1. *Peritonitis.*—First and foremost, peritonitis stands as the complication which occurs more frequently and is more to be dreaded than any other. It may result from a perforation of the appendix or from extension of the inflammation by continuity of structure. The micro-organisms concerned are the common bacillus of the colon and the usual pus-producing cocci. Infectious peritonitis will occur sooner or later in all suppurative cases of appendicitis, very early in the fulminant forms, more tardily in those of slower development. Unless speedily relieved, every case thus complicated must be fatal. General peritonitis is recognized without dif-

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ficulty—a resistant, board-like condition over the whole abdomen, with extreme tenderness and distention; a rapid, wiry pulse and an anxious facial expression. The question of operating in such cases is still debatable. Some surgeons would submit all of them to immediate operation, giving the patient the only chance, though the tide be against him; while others refrain from interfering in what they regard as hopeless conditions, being unwilling, as they aver, to bring a beneficent surgical procedure into disrepute for no good purpose. These so-called "eleventh hour cases" are occasionally rescued by rapid work, repeated hot saline flushing and the judicious employment of drainage. The outlook undoubtedly depends more upon the virulence of the systemic infection than on the amount of local mischief present. Discussion of this part of our subject would lead us into devious paths and more elaboration is unnecessary.

2. *Intestinal Obstruction.*—The appendix as a cause of intestinal obstruction has been commented on by a few writers. The most frequent method of its production is through the formation of adhesions, which cause a bending or twisting of the bowel. More rarely it is brought about from the encircling of the small intestine by the inflamed appendix, constricting the lumen and producing strangulation. A case of this character came under my care last year: H. P., colored, was admitted to Rex Hospital on August 19, 1902, with marked symptoms of intestinal obstruction, dating back four days. He was *in extremis*. The pulse was 135 and the temperature 101. The abdomen was opened in the median line and the appendix was found wrapped tightly around the ileum three inches from the cecum, the whole area being embedded in a mass of plastic lymph. After removing the appendix, a hasty resection of the gangrenous intestine was made by means of the Murphy button and the cavity drained. The patient died from exhaustion the next day. When we think of the conditions present in every appendiceal lesion, it is a great wonder that more of these cases have not been seen. Their scarcity is very likely due to the fact that the appendix is so seldom found pointing inward and lying in close relation with the small bowel. I once saw in the practice of another surgeon a case in which bands of adhesions passed from the tip of the appendix around the colon, producing intense pain and partial obstruction. Though the symptoms were definitely localized, it was difficult to determine beforehand whether it was simple appendicitis or occluded intestine. As a rule, the bowels are easy to empty in appendicitis and, if such is not the case, the idea of intestinal obstruction should be entertained and the appendix as a possible cause must not be lost sight of.

3. *Floating Kidney.*—The association of appendicitis and floating kidney has been found so often, especially by those who operate largely on women, as now to occasion no surprise. Edebohls, in 1894, was the first to call systematic attention to the condition. He devised the operation of removing the appendix through the lumbar incision and then anchoring the kidney in the usual manner. Manton (1) has recently written of the great frequency of this complication and believes it to be more than a mere coincidence. He regards nephroptosis as the most common cause of chronic appendicular disease. Out of 73 patients with mobility of the right kidney, he diagnosticated chronic appendicitis in 48, or over 65 per cent. Floating kidney is more apt to complicate the chronic forms of appendicitis

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and the recognition of its presence is generally not difficult. During an acute exacerbation, however, the muscular resistance may be so great that without anesthesia it may be impossible to palpate the region thoroughly. Whether in the majority of cases the inflamed appendix predisposes to displacement of the kidney or whether the floating kidney produces the recurrent appendicitis, it would be too much to say. Ochsner thinks that the increased intra-abdominal pressure and the extensive adhesions incident to chronic appendicitis may help to account for the mobility of the kidney. It seems natural also to assume that a kindey dislocated by other causes would tend to disturb the circulation in the appendix, a pathological change essential to disease in that organ. According to Edebohls, the movable right kidney compresses the superior mesenteric vessels between the head of the pancreas and the spinal vertebrae, thus producing congestion and subsequent inflammation of the appendix. In individual cases the history might be of great aid in determining which was the primary lesion.

I have had four cases of appendicitis with floating kidney in the same patient and these were observed within a period of two months. They were all women, three married and one single. Only two came to operation and both refused to submit to nephropexy, preferring to have the more serious evil alone relieved. I think that, in cases where the two conditions are to be attended to at one sitting, Edebohl's method is a proper procedure. Should the operator not be sufficiently skillful to get the appendix through the lumbar incision, he may close this and open the abdomen—an alternative to which more than one surgeon has had to resort.

4. *Gall-Stones.* — The simultaneous occurrence of gall-stones and appendicitis is remarkably frequent. One high authority states that 35 per cent. of patients with cholelithiasis have also had appendicitis. The appendix is many times found adherent to the gall-bladder. Just as in the case of floating kidney, the same query arises here as to which one of these organs is the original causal agent in the production of disease in the other. Numerous theories could be offered to support views on either side and the problem might then be no nearer a solution. The practical fact is that, independently of adhesions, appendicitis is repeatedly accompanied by gall-stones, and *vice versa,* so that in operating for either of these conditions the other should be suspected. When the symptoms suggest this complication, it is well to make the incision at the proper point through the right rectus muscle, in order to include the regions of both organs.

My experience in the matter may be expressed by notes of the one illustrative case which I have had: Mrs. W. H. B., age 28 years, had a typical attack of mild typhoid fever extending from July 23 to September 12, 1902, and made a perfect recovery. During the night of October 30, she was seized with severe pain in the back, about the fourth lumbar vertebra. This was relieved by appropriate treatment, but the next day at noon it returned, at that time radiating around the right side to the region of the liver, toward the umbilicus and finally over the whole abdomen. The temperature varied between 100 and 101 degrees. On November 6, when I first saw the patient, examination of the abdomen revealed a tender, somewhat movable mass in the right hypochondrium, extending to the upper iliac region and nearly to the midline. McBurney's point was very sensi-

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tive, though there was no marked rigidity and no distention. Operation, November 8, 1902; appendectomy and cholecystostomy. An incision was made parallel with and to the outer side of the right rectus over the prominence of the swelling in the hypochondriac region. The omentum and intestines were densely adherent and after enucleating the mass it was seen to be the enlarged and thickened gall-bladder. This was pushed upward and the wound enlarged downward, so that the appendix, inflamed, kinked and adherent at its tip, could be removed. The lower part of the incision was then closed with silkworm gut sutures and the gall-bladder stitched to the upper part. When it was opened, a small quantity of mucopus and sixteen biliary calculi were evacuated. No stones were found beyond the cystic duct. Hot saline irrigation and gauze drainage completed the operation. Convalescence was uneventful, save for the persistence of the biliary fistula.

5. *Adhesions to Other Organs and to Abnormal Growths.*—The appendix may adhere to any structure in the abdominal cavity. It may form adhesions to normal organs without altering their condition or become involved in inflammatory exudates and other morbid processes. In women the appendix is most often adherent to the right adnexa, both in their healthy and their diseased state. In one instance I found it growing to the right ovary in a girl who had dysmenorrhea only after the beginning of the appendiceal attacks. It is frequently adherent to a right-sided pus-tube. At a recent meeting of the London Gynecological Society, (2) an interesting discussion was had on adnexal disease involving the appendix, the specimen being shown by Dr. Macnaughton-Jones. Several cases were recalled by other surgeons present. Mr. Jessett spoke of one in which the appendix was "attached to the stump of an old operation" and "agreed with Dr. Jones that it was well to examine the appendix in all operations for adnexal troubles." Mayo Robson had seen three such cases and emphasized the fact that the frequency of these complications was an argument against vaginal operations. Another common adhesion-point for the appendix is the liver. Twice have I found it adherent to this organ, once in each sex.

The appendix not infrequently becomes entangled in the growth of an abdominal tumor and attaches itself wherever adhesions happen to form from the localized peritoneal inflammation. This added danger renders operation for such tumors the more necessary. Over and over again we are compelled to remove the appendix under these circumstances. A short time ago Howard Kelly directed notice to this question and insisted on the routine examination of the appendix in every abdominal operation. The result of his own views and of those of the large number of operators quoted by him was to advise removal of the appendix, if adherent or diseased, but not otherwise. As evidence of the manner in which the appendix may become involved in extensive disease of the pelvic organs, it may be well to relate a recent case of my own. Martha B. was operated on for a fibroid of the uterus. When the abdomen was opened, a formidable array of matted intestinal adhesions met the sight. These were with the greatest difficulty separated and the following pathological conditions discovered: a large intraligamentous fibroma; an ovarian cyst on the left side; a pyosalpinx on the right; an inflamed appendix adherent

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to this and enveloped in a roll of omentum. Total ablation of the pelvic structures was done and the appendix removed. While straightening out adherent intestines in the deep pelvis, the pyosalpinx was ruptured and the sigmoid flexure torn completely through. An end-to-end anastomosis with sutures was effected and the abdomen flushed, but not drained. This woman made a marvelous recovery. She rallied quickly from the shock following such a necessarily prolonged operation and never had a bad symptom. Her bowels moved on the fifth day; she sat up first during the third week.

6. *Pregnancy.*—In these days of refinement in diagnosis and boldness in treatment, the recognition and cure of appendiceal lesions complicating the pregnant and puerperal states may enlist the responsibility of any practicing physician. The management of appendicitis occurring in pregnancy presupposes a thorough knowledge of obstetric and abdominal diagnosis and the courage to apply the appropriate treatment. The prognosis rationally depends upon the stage at which the condition is found. It is dangerous only as the infected appendix itself is dangerous; the pregnancy adds but little to the risk. Fowler states that in diffuse peritonitis the mother and child are invariably lost; but that in cases which are diagnosticated early the women recover and have normal deliveries. Carstens (3) reports five cases of appendicitis in pregnant women, with two deaths, one being an acute suppurative attack and the other due to shock following abortion which occurred 24 hours after operation.

A case on which I operated last year demonstrates the difficulties in diagnosis as well as the need for immediate interference. Mrs. E. L., age 38, was first seen by me at her home in another town. She was advanced six months in her seventh pregnancy and had "never felt right" during the entire gestation period. Her physician, who kindly referred her to me, had detected an abnormal growth in the abdomen a month or two before. Four days previous to my visit the patient was suddenly seized with vomiting, pain and fever; followed by a gradually increasing distention of the abdomen. On examination the temperature was 101 and the pulse 120; the abdomen presented diffuse tenderness and rigidity and, besides the pregnant womb, nothing could be made out beyond a vague enlargement in the epigastrium. The most probable diagnosis was thought of, viz., ovarian cyst with torsion of the pedicle. The patient was brought to Rex Hospital the next day and prepared for immediate operation. The abdomen was opened in the median line and a large ovarian cyst recognized at once. Tracing it downward, its pedicle was found to be twisted four times to the right, while the appendix was plastered firmly around it, being involved in the torsion. These turns were quickly pulled apart, the cyst pedicle ligated and the appendix taken away. A prompt and perfect recovery was the immediate result; an easy birth at term was the sequel. The baby had inanition and lived but a few days. The cyst was severely strangulated, its contents being a dark chocolate-colored material and its walls containing minute hemorrhagic points with beginning sloughs. The appendix was infected within and inflamed without.

7. *Injuries.*—It is so rare that the appendix is injured in gun-shot wounds of the abdomen that I shall dismiss this division of our subject with the report of what I consider the most remarkable

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case on my records both as to the lesions found and the result secured. For the privilege of reciting this case I wish to thank Dr. J. R. Rogers, of this city, surgeon to the Seaboard Air Line Railway, and Dr. C. P. Rogers, now of the resident staff at the Johns Hopkins Hospital, Baltimore. Through courtesy of the latter I was permitted to operate on the case and to his intelligent after-treatment is due in no small measure the successful issue. Briefly stated, the case is as follows: J. M., a strong, healthy colored man, while on a moving train August 19, 1902, received a pistol ball in the abdomen at close range. He was brought to Raleigh by Dr. Goode Cheatham, of Henderson, N. C., and admitted to Rex Hospital. His condition was hopeful: temperature 100 1-5, pulse 92, perfectly conscious and not suffering unduly. There was a wound in the right iliac region, on a level with the umbilicus and 5 inches distant from it, appearing to run in a direction downward and inward. No other evidence of injury was present. At 9 p. m., seven hours after the shooting, the patient was anesthetized and the abdomen opened in the linea alba just below the navel. A moderate amount of blood and a few clots presented. These were sponged out and a systematic search of the intestines instituted. The only perforations were in the cecum—a wound of entrance and one of exit—in a plane almost anteroposterior. A clamp being applied temporarily to these openings, the colon was lifted up and the condition of the appendix noted. The bullet track passed through the base of this organ and had torn it off, except where it hung by a slender strip of bowel wall. Its tip was also attached by old adhesions to the ileum and post-cecal tissues. (This is interesting in view of the history afterwards obtained that the man had been laid off duty for two weeks over a year previous on account of a severe attack of colic). The thread-like process holding the appendix was then snipped off with scissors and the opening thus left also clamped. The three perforations were then united after the Lembert fashion, using peritoneal investments wherever they could be obtained and employed to advantage. No trace of the further course of the bullet could be discovered after an arduous exploration. The abdominal cavity was flushed with hot saline solution and a gauze drain inserted and brought out at the lower angle of the skin incision, which was all but closed with en masse silk-worm gut sutures. The time consumed in the operation was about fifty minutes.

Equally as interesting as the operative findings was the subsequent course of the case. The convalescence was comfortable and at no time were there dangerous symptoms. The following notes are taken from the records of the first few days: August 20, gauze drain renewed; great abdominal distention; restless and in pain; urine muddy and bloody. Highest temperature 101 1-5, pulse 108. August 21, vomited yellowish offensive material; very restless; sediment in urine, but no blood. Hiccough; t. 100 3-5, pulse 92; three stools from high enema. This condition remained practically the same until August 27, when the distention had almost disappeared and the hiccough had gone. Then the patient was given light diet and was able to sleep all night. On September 2 the temperature began to rise, going up as high as 103 1-5 the next day. There was tenderness for several days in the right iliac and lumbar regions and signs of a mural abscess appeared around the

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right margin of the wound. As soon as this was evacuated, the temperature descended and, save for an occasional slight rise, remained about the normal thereafter. The patient sat up in bed October 3. Nothing eventful then took place until October 10, nearly two months after the operation, when an astonishing thing happened. On that day at 6 a. m., while the man was on the commode, being the first time that he assumed the upright position, he passed the bullet from his rectum. No happier ending to a desperate case could have occurred. It is hardly necessary to add that everything was plain sailing after this and a permanent recovery was the final outcome. The patient was discharged on October 27.

In all probability there never will be a satisfactory explanation of the manner in which the bullet came to be discharged by the bowel. One of two theories might account for it: first, that the bullet, its force being spent, entered the bowel at the time; second, that the ball lodged in the tissues of the postcecal region and made its way into the bowel later. The bloody urine on the second day and the tenderness in the lumbar region on the thirteenth day may have been associated with conditions pointing strongly to the second theory mentioned above. At any rate, the termination is unique, as far as our information goes, and particularly in view of the fact that frequently missiles of this kind not only elude discovery at the operation, but are not heard from ever afterward.

8. *Anomalies of Position.*—LaPlace (4) states: "The appendix is not always located in the right iliac region. In very stout patients a certain degree of enteroptosis is present and this changes materially the location of the appendix. One may then find it in any part of the abdominal cavity, according to the particular location in which the ileocecal region has accommodated itself. Under these circumstances the location of pain becomes a very obscure matter. It may be found at any portion of the abdomen radiating in various directions."

A number of observers have found the appendix with the cecum entirely on the left side. Also, it may be of such a length that it reaches across the abdominal cavity. The appendix is occasionally seen in the contents of a hernial sac. Fowler (5) mentions an instance in which the appendix was strangulated in a femoral rupture without a previous history either of appendicitis or of hernia. Hemsted (6) records a similar case. Elder (7) operated on an infant of seven months and found a gangrenous, perforated appendix in the sac of a right inguinal hernia.

The only case of an abnormally located appendix I have encountered was in a very old colored man upon whom I operated seven years ago for a swelling in the region of the right crural ring. The condition proved to be a femoral hernia with the appendix and its mesentery as the sole occupants of the sac. The appendix was ligated, the bowel pushed back and the opening closed. There was no infective process or structural change in the appendix. One year and a half later the man died and I had occasion, in doing the autopsy, to confirm the former condition. The possibility of the appendix being involved in a strangulated hernia should never be overlooked.

202-203 Tucker Building.

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Management of Injuries to Fingers and Hand.*

By D. A. Stanton, M. D., High Point, N. C.

In choosing this subject as a basis, I am aware that the ideas of physicians are as varied as the character of injuries inflicted, yet all tending to the same end and in due time each one has success.

I reached the conclusion which guides me in this class of surgery from an observation of twelve years practice in a town having over forty wood working concerns, so my material for experimenting has not been limited and I have tried to profit, both to my patients and myself by the vastness of the accidents.

The chief object to keep in view in injuries to the fingers and hand is to economize as to the amount of member to be sacrificed and to minimize time to the patient.

To amputate every mangled finger is a mistake which has too often been made by every one doing this class of work. It is remarkable what reproductive power and fingers have, an injured finger that at first appearance could not be saved, will by proper care, recover into a useful member. Unless the joint is disorganized the member should be left. No amount of flesh destruction should deter the surgeon; the smallest amount of periosteum left, with a flesh covering will soon be reproduced in a useful finger. One common mistake is the tying of arteries in surgery of the fingers and hand, this should never be done, not even if the deep arch is involved in the injury, torsion and pressure is all the hemostatic need. A ligature buried in the finger or hand will act as a foreign substance and prevent union so long as it remains there. The power to absorb ligatures in this part of the body does not seem to be equal to that of any other part of the economy.

No more stitching of the skin should be done than is necessary to approximate the larger pieces of skin and flesh.

A thorough cleansing of the part with sterile water is the best antiseptic. Antiseptic surgery is nothing more nor less than clean surgery, and while there are occasionally cases that require green soap, turpentine and even bichloride of mercury to render the part clean, but as a rule a sterile salt solution is all that is needed. I have primary union oftener where I use only salt solution than where I use bichloride solution.

After cleansing the mangled member all tags and shreds of skin and flesh should be trimmed off with the scissors and as few stiches as is necessary to approximate the edges of the wound put in.

After preparing the injured member in the manner stated, wrap the part loosely with sterile gauze and keep moist for forty-eight hours with some antiseptic solution. The one I have learned to like and and am in some degree partial to is bovinine one dram to two

*Presented to the Tri-State Medical Association (Virginia and the Carolinas) at the Asheville Meeting, Feb. '03.

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ounces of camphor water. At the end of forty-eight hours remove the dressing and you will find a clean, healthy wound, all bleeding stopped and the dressing having kept moist it will come off without any pain or disturbance of the wound. After this irrigate again with sterile water, dry and dust with any antiseptic powder. Boric acid, acetanlid and aristol equal parts is as good as any. If there are stitches to be removed let this last dressing remain undisturbed for six days, at which time you will find the wound healed; remove the stitches and dress with dry gauze and do not disturb the part again.

If the injury does not require stitching, after a thorough cleansing apply a very thin layer of absorbing cotton and saturate this with flexible collodon, wrap loosely with gauze bandage and do not disturb for a week, then the injury will have recovered.

The most frequent error committed in this department of surgery is the too frequent change of dressing; unless there is suppuration, and that will not often occur under the manner stated above, the dressing should not be tampered with for a week after the first forty-eight hours.

Another method as to dressing, which so far as I know is original with me, is by the muzzle method, as I call it for want of a better name. When the injury in the finger requires either amputation or the near approximation of the skin, cleanse the part and put nothing except a dry powder on the wound, encase the hand in the wire muzzle, which I have devised and here show you. Over this place gauze of four layers, over this spread a sheet of guttapercha and cover well with roller bandage. By this method the hand is protected from all external agencies and the injured member from all pressure of bandages which is often difficult to remove and do injury to the wound.

Under this plan nature can form and take care of her own dressing and the time of repair is lessened very much.

Surgery of the Hand.*

By W. J. McAullay, M. D., High Point, N C.

With the great increase of manufacturing enterprises in the Southern States there is in the natural course of events a corresponding increase of injuries to the hands of those who toil in the growing and increasing manufacturing plants. And the railroads with their greatly increased pay rolls and unprecedented amount of business have unavoidably been sending their quota if men to us for repairs.

And as these noble sons of toil bring to us their rough and corny members mangled and bleeding, cut, mashed or sawn asunder, we can but feel a thrill of pity, and as these privates from the ranks of our growing industrial army turn in their weapons for repairs there is always a strong desire, or should be a strong desire to save every particle of these useful hands that is possible to save. And often attempts to save parts of the hand are successful beyond our most sanguine expectations.

The powers and possibilities of repair are so great in the hand that we may expect almost anything to be repaired. Fingers and thumbs cut entirely off may be replaced and saved and often when mashed almost to a pulp they may be saved. The bones may be severed and an inch or more of the bone between joints may be torn out or splintered up and yet even with

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*Presented to the Tri-State Medical Association, at the Asheville meeting, Feb. '03.

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all important arteries cut this finger can be made useful. But to say these things to this body of men may evince simply the desire to say something. But I say them to show my own faith in the hand's powers of repair. And actuated by this faith in its powers of repair I wish to state some results attained from work done along this line and especially to emphasize the value of a moist dressing for the first 3 to 4 days after injury. To simply outline my plan it is this: Take a hand cut to pieces and fingers dangling about and covered with blood. If the injury is done by a wood working machine or anything that is reasonably clean, the spicula of bone are removed after I have thoroughly washed my own hands and instruments in carbolic solutions. The fingers where the joints are too badly injured are removed at the last injured joint. The strips and ends of skin are then stitched into the best position and without any washing or antiseptic solutions or powders whatever the parts are wrapped in sterile gauze, blood and all together. This blood is an ideal dressing and helps to bind the severed parts together and saves stitches often. The dressings are now wet and kept moist from 3 or 4 days with a solution of Phenol Sodique 40 parts, Listerine 40 and Laudanum 20. Not one time in 40 will it be necessary to remove these dressings in less than a week. There will be no congestion or pain but the parts heal rapidly. Usually the dressings are removed in 7 to 10 days and the stitches taken out. Then a dressing of Balsam Peru 25 parts, Icthyol 10 and Castor Oil 65, is applied on gauze. Any surface of much size not covered with skin is now covered with silver foil, because to put gauze on a large granulating surface will certainly produce a noisy time at the next dressing. Of course if the hand is injured by some rusty machinery or dirty timbers I then scrub the injured parts and use antiseptics and wash away all blood so no nidus is left for the production of bacteria. But the hand can take care of a few pathogenic bacteria any way and unless the injury is known to have been done by some unclean thing I do not wash it. All the washing won't remove all the germs any way and certainly any washing with antiseptics does much injury to the parts. The best wash I find to be sterile water. I don't believe I have congestion and pus formation from infection in 5 per cent. of my cases treated this way.

The Bureau of Chemistry, of the Department of Agriculture, has grown to be one of the most important in the whole service. There are now eight laboratories, each with its distinct and well-defined field of labor. These are foods, sugar, dairy products, fertilizer, soil analysis, road materials, insecticides and agricultural waters and dendrochemical or aboreal studies. Among the most comprehensive studies attempted by the Bureau are the effects of environment on special plant growths, such as sugar beets and wheat, especially valuable in the introduction of foreign types. Quite as valuable is the work to determine the fertilizer requirements of plants and the means of determining these by chemical analysis, a study that obviously could only be carried out under unprejudiced governmental control.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

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SELECTED PAPERS.

The Surgical Treatment of Anuria.

In a paper read before the Chicago Surgical Society, Dr. A. D. Bevan reports an extremely interesting case of anuria, which he succeeded in relieving by surgical means. The patient, a man, 23 years of age, presented himself at a hospital on August 1, 1902. He had passed no urine for six days. He gave a history of repeated attacks of pain in left kidney for the past ten or twelve years, and for the past four or five years had noticed a fullness in left lumbar region. A short time before coming to the hospital, he had begun having pain in right side, which was more or less continuous. On entering the hospital his condition is thus described:

"Consciousness is retained. Patient is a young man; well developed; well nourished. Face slightly pale. Pupils equal on the two sides, and moderately dilated. Vision is normal. No disturbance of any special senses. Heart and lungs appear normal.

"A fluctuating tumor is situated in the left lumbar region, extending from the last rib to the crest of the ilium. It appears to be retroperitoneal, since there is tympany upon percussion over the tumor anteriorly. Distinct tenderness upon pressure over course of right ureter. Distinct rigidity of abdominal muscles, especially on right side. Upon catheterization, no urine came from the bladder. Examination otherwise negative. The patient is able to walk about; does not give the appearance of being seriously ill, and has no symptoms of uræmia."

Three hours after admission, a lumbar incision was made on left side and a large hydronephrotic sac was found and opened, allowing the escape of three or four pints of fluid. A rubber tube was placed in pelvis of kidney. A large amount of blood-stained fluid escaped upon the dressings, but as repeated examination showed the fluid to contain a very small amount of urea, from .2 to .3 per cent., and no urine appearing in bladder, it was decided to make an incision over the right kidney. This was done twenty-four hours after the first operation. The right kidney was about twice natural size and contained 8 or 10 ounces of a urinous fluid. A similar drainage was applied as in left side, and the fluid then showed 1.5 to 2 per cent. urea. No urine was passed from bladder until 10 days after operation and then only very small quantity. Methylene blue was given by the mouth and dressing on righ side showed stain in 40 minutes—no blue stain on left side. The patient did well, general health being excellent, but urine was still passed almost entirely from right lumbar incision three months after operation. An effort was then made to find and relieve the obstruction to flow of urine from right kidney. The fistulous tract was enlarged and a small sound passed down the ureter into the bladder without meeting any obstruction, although the ureter seemed much contracted. Four or five weeks after this operation patient began passing most of urine through the bladder, and some weeks later on leaving the hospital the wound on right side closed completely. Small tube was kept in left side, but discharge was very slight. In spite of the three operations and repeat-

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ed examinations by means of X-rays, no stone of other cause for the obstruction in either side was located.

As a result of his experience in this case, Dr. Bevan has made a thorough study of anuria and its surgical treatment, and his statement of the present day methods of dealing with this generally little understood subject will prove interesting and instructive:

Total suppression of urine occurs:

1. From mechanical obstruction of the ureter of the single functionary kidney of an individual, the other kidney either being congenitally absent or destroyed by previous disease.

2. From mechanical obstruction of one ureter in an individual possessing two functionary kidneys, with increased intrarenal pressure on the obstructed side, which by reflex nerve action prevents the unobstructed kidney from functionating, the so-called reflex anuria. Or, possibly, after a nephrectomy the involvement of the nerves in the pedicle may produce a reflex anuria.

3. From trauma of both kidneys, which, for a time or until fatal issue, is followed by complete cessation of function; also from trauma of a single kidney, which apparently by reflex action so affects the uninjured kidney that complete anuria results.

4. From acute nephritis, as sometimes seen in scarlet fever and other forms of septicæmia.

5. From destruction of practically all kidney tissues as the result of such chronic leisons as tuberculosis, cystic degeneration, etc.

6. From certain poisons, as phosphorus, lead and turpentine, ether, chloroform, etc.

7. From the peculiar condition known as urethral fever, commonly the result of the passage of a catheter or sound.

8. In the polymorphous symptom-complex, known as hysteria, anuria may occur.

Anuria is a condition. It is not a disease *per se*. Until within the last twenty years, indeed, one might almost say until the last ten years, the condition has been discussed merely as a symptom occurring in a number of diseases, which usually marked a fatal termination, and for which little could be done by the medical attendant. Within the last twenty years, however, so much light has been thrown on the subject by Tuffier, Morris, Israel, and others, and so much good has been accomplished by intelligent surgical interference, that today the condition of anuria is entitled to be placed, I believe, in the same class as the condition ileus, as one of sufficient importance to be considered and handled as a surgical entity.

Such a consideration of the subject is of special value from a clinical standpoint, because in the majority of cases, or at least in those cases in which interference holds out any prospect of relief, the anuria is the important overshadowing condition with which we have to deal. It is *the* condition which menaces the life of the patient. It is *the* condition which is evident, even though the exact cause of the obstruction may not be clear; and it is *the* condition which must be relieved in order to save the life of the patient.

It shall be my effort in the present essay to discuss the subject of anuria in somewhat the same way as we do ileus, and attempt to present a working classification which shall be useful at the bedside as a means of determining our line of interference or action.

The clinical classification which I would suggest is the following:

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ANURIA.

1. *Obstructive.*

(*a*) Obstruction to ureter of single functionary kidney. This is the most common form.

(*b*) Obstruction of both ureters practically simultaneously. This is very rare from stone; more common from extramural pressure, as carcinoma of uterus.

2. *Reflex or Paralytic.*

(*a*) Obstruction of one ureter, increased intrarenal pressure of this side, which, by reflex action, suppresses function on the other side.

(*b*) Removal of one kidney and, by reflex action, from injury to nerves in pedicle; suppression on the other side.

(*c*) In this group can fairly be included the rare cases of hysterical anuria.

(*d*) Traumas of kidney or kidneys.

3. *Non-Obstructive or Nephritic.*

(*a*) From nephritic, as after scarlet fever.

(*b*) Anæsthetics; ether, chloroform, etc.

(*c*) Poisons, as phosphorous, turpentine, etc.

(*d*) Poisoning by toxins in various general diseases, as cholera.

(*e*) Urethral fever, which, as an acute septicæmia, may produce suppression, or possibly, by reflex nerve action, produce same result.

(*f*) Lesions gradually destroying first one and then both kidneys, as tuberculosis, cystic degeneration, etc.

A clear differentiation should be kept in mind between anuria and uræmia. Anuria is a suppression of urine; merely a condition, not a disease. Uræmia is a disease, a toxæmia, developing from a nephritis, or in the course of an attack of anuria.

That uræmia is not due simply to the suppression of urine is clearly shown by a study of the cases of obstructive anuria where patients continue in fair condition for a week, or even two weeks, without a symptom of uræmia developing. Patients with total suppression have lived twenty-five days after the onset of the attack, whereas, as is well known, uræmic patients seldom live more than three days after the beginning of an attack, with total suppression.

Uræmia is usually the cause of death in anuria, but may not develop at all in the cases which recover either spontaneously or are relieved early by surgical interference.

In the first two groups of our classification, *i. e.,* obstructive and reflex anuria, uræmia is not an essential part of the picture. In the third group, non-obstructive or nephritic cases, uræmia is an almost constant accompaniment.

Let us consider these three groups in the order named, and study the pathology, symptoms, course, termination, and treatment.

1. *Obstructive Anuria.*—Here the pathological anatomy reveals at operation or post-mortem, in the great majority of cases, a single functionary kidney, the other kidney congenitally absent, or recovered by previous operation, or destroyed by previous disease. The ureter of the single functionary kidney is obstructed by stone, blood-clot, pus, masses of crystal of uric acid, cystin, etc., by kink in ureter, by valve-like action of ureter, with oblique insertion into pelvis, by extramural pressure, as from carcinoma or fibroma of uterus or abscess in pelvis or abdomen.

The simultaneous obstruction of both ureters with resulting anuria is rare.

The symptoms are usually pain of the character of a renal colic, on the side last obstructed, followed by anuria accompanied by tenderness over region of

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kidney and ureter, and muscular rigidity on that side, sweating, seldom of uriniferous order. In a number of cases, but by no means constant, physical examination determines the presence of an enlarged kidney on the affected side. This is often difficult to determine before anæsthetic because of the muscular rigidity. The general condition of the patient is often surprisingly good; no temperature, no increase of pulse-rate, and, as in my case, the patients often walk about and eat and drink and present to all outward appearance almost a normal condition for a number of days after the onset of the attack. Usually by the seventh or eighth day uræmia symptoms appear, although, as noted, these may be postponed for two weeks or more, and then the patient, if not relieved rapidly, succumbs to the toxæmia. In many cases where the opposite kidney has been destroyed by previous disease, a history of symptoms pointing to this fact can be elicited, or, as in my case, where this previous disease has resulted in a hydronephrosis, this fact may be elicited by the physical examination. Sometimes, however, the onset of the attack is not marked by any acute symptoms, but comes on insidiously, and again may come on very acutely, but without any previous history to aid in the diagnosis.

The most common picture in calculous anuria is quite clear. A history of repeated renal colic on one side, which results in destruction of that kidney as a functionating organ, and then later renal colic on the other side, with resulting anuria.

The indications for treatment in obstructive anuria are clear, distinct, and imperative, *i. e.*, a nephrotomy on the kidney last attacked, not later than forty-eight hours after the onset of the symptoms. The pain, tenderness, and muscular rigidity usually point clearly to the side to be operated on.

Such nephrotomy meets the vital indications. It furnishes an outlet for the urine; it enables us to remove the cause of obstruction, if in the kidney or pelvis, and by division of the kidney tissue and bleeding relieves the congestion, which, although a result of the obstruction, is a condition which, if it continues, of itself prevents the secretion of urine. Such a nephotomy can be rapidly done, probably safest under nitrous-oxide anæsthesia. Prolonged operations, such as removal of stone from ureter, or plastic work on the ureter, should not for a moment be considered at the first operation, but should be postponed until the patient has been relieved of the anuria and brought into fairly normal condition, when it can be more intelligently and safely performed.

Israel quotes statistics giving 66 per cent. of recoveries after operation, and but 28.5 per cent. without.

Morris gives 51 per cent. of recoveries from operation and 20.8 without.

It is to be remembered, however, that many of these operated cases were allowed to go unrelieved for a week or more; and it is quite certain that, if the cases were operated on by the end of forty-eight hours, the recoveries would exceed 75 per cent.

A nephrotomy is to be regarded as the operation of choice, instead of an ureterotomy or incision into the pelvis, because it is easier of performance, can be more rapidly done, gives a freer access to kidneys and pelvis, and relieves the congestion.

If, at the time of the nephrotomy, the surgeon finds that he has operated on the wrong side, as has occasionally happened, he should at once operate on the other side, unless, as in my case, there is fair ground for believing we have a

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reflex anuria to deal with, and that relieving the pressure in an old non-functionating kidney may relieve the reflex anuria. If, by the next day, however, this hope has not been realized, a nephrotomy should be made on the opposite side.

2. *Reflex Anuria.*—The existence of reflex anuria has been denied by a number of observers. Personally, I have been very sceptical on this point, and doubted the existence of this condition. I am quite positive that many of the reported cases of reflex anuria have been pure types of obstructed anuria, and the cause of the obstruction not found at the operation, or even post-mortem. On the other hand, a careful review of the reported cases, and especially the experimental work of Dr. Arthur Gotzl, one of Israel's students, has convinced me of the existence of such a condition. Gotzl showed by experiments on dogs that, by increasing the intrarenal pressure in one kidney, he could lessen and even completely suspend the secretion from the other.

This question is of great importance in determining the treatment of a case, *i. e.,* in deciding upon which side we shall make our nephrotomy.

Theoretically, in operating on a case of reflex anuria, we should leave the sound kidney, and operate on the side which is diseased, and which by reflex action has inhibited the secretion of the other, the sound, organ; and in some cases this plan has been successful in relieving the anuria, as shown by a number of cases where a hydronephrotic kidney causing reflex anuria has been incised or tapped, relieving intrarenal pressure, and this followed by resumption of function by the other kidney.

Practically, the question presents a difficult problem, because the diagnosis of reflex anuria is never to be made at the time of operation with any degree of certainty. In those cases where the pain, tenderness, and muscular rigidity are confined to one side, and on operating on this side a non-functional kidney is found, and intrarenal tension relieved, we may hope that we have a reflex anuria to deal with, and that this procedure may restore the function on the opposite side.

However, if within twenty-four hours our hopes are not realized, a nephrotomy should be made on the other kidney.

In the anuria from trauma we have a composite and complicated picture. Here both kidneys may be injured and cessation of function result, either from nerve injury or injury to blood vessels, or rupture of both kidneys and extravasation of urine into the perirenal spaces or into peritoneum. Or we may have but one kidney injured and anuria result from reflex suppression of the other side.

The line of action to pursue must be controlled by the major symptoms present.

A case where anuria is but one of the results of surgical shock, without gross injury to the kidneys, is to be handled by salt solution, per rectum or subcutaneously. A case where anuria is the direct result of gross injury to kidney or kidneys should be operated on, kidney drained, and hæmorrhage controlled. Probably this had best be done under nitrous-oxide anæsthesia.

3. *Non-Obstructive or Nephritic Anuria.*—Non-obstructive or nephritic anuria has been generally regarded as strictly a medical condition, one which occurred in the course of profound and fatal uræmias, and for which surgery held out no hope.

Within the last few years, however, since operative treatment has been suggested and tried in both acute and

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chronic nephritis (*i. e.*, splitting the fibrous capsule and stripping the fibrous capsule from the kidney) and nephrotomy, a number of cases of nephritic or non-obstructive anuria had been submitted to operation.

The reasoning on which such treatment is based is the following: The congestion of the kidney present in these cases, although a result and not the cause of the cessation of function, is, nevertheless, a factor in preventing secretion; and if by a surgical operation, as nephrotomy, this congestion could be relieved, secretion might be resumed, and the patient go on to recovery. The position seems logical, and a number of clinical results seem to support it. Such treatment is, however, to be regarded as, as yet, distinctly experimental, and not to be indiscriminately advocated and employed.

The conclusions from this short study are:

1. The clinical importance of recognizing the three forms of anuria—obstructive, reflex, and non-obstructive—is to be emphasized.

2. The imperative necessity of surgical interference in the obstructive and reflex forms, and its possible value in the non-obstructive cases.

3. That in the first two varieties, at least, a rapid nephrotomy on the side of pain, tenderness, and muscular rigidity is the operation of choice. If necessary, do not hesitate to make a double nephrotomy.

4. That nitrous-oxide anæsthesia is probably to be preferred.

5. That time-consuming operations to relieve permanently the obstruction are to be postponed to a later period, after the patient has recovered from the anuria.

6. Operate early by the beginning of the third day.

See page 255 for an attractive proposition to all our subscribers. We consider it the best offer we have ever been able to make our friends.

NEWER MATERIA MEDICA.

Iron as a Remedy.—Time out of mind, iron has been leaned upon, as one of the special standbys in medicine, particularly as a builder and reconstructor. But unless Iron be given in proper form, one might as well give absorbent cotton, or chips or wet stones. When we desire to produce any increase in the number of red blood corpuscles, and to make them redder and richer with hemoglobin, we need to be sure of the form of iron that we are giving. The evidence has been accumulating these many years, that Manganese, in itself an admirable remedy, combined with Iron emphasizes the potency of both.

Dr. Gude, the great German chemist, contributed very definitely to the good of the profession, when he presented the product of long years of experimentation, and clinical experience, the Therapeutic product known as Pepto-Mangan (Gude).

Added to the many hundreds of clinical contributions, Dr. J. W. Frieser, of Vienna, Austria, recently reports most favorably, and very forcibly, observing as follows:

"Pepto-Mangan contains Iron and Manganese combined with Peptone in the proper proportions, and in a readily digestible and absorbable form, so that

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the preparation can be completely utilized by the organism. As is well known, the peptones represent artificial predigested products, which when taken into the organism make no special demands upon the digestive functions, which in anæmic and chlorotic persons are usually weakened and impaired in action. This fact is the more important, since in these cases, the digestive process and the secretion of gastric juice is usually reduced, in consequence of which the nutrition is quite impaired, while frequently there is a condition of hyperacidity of the gastric juice. It has been most gratifying to me to observe that during the use of Pepto-Mangan (Gude), which experience has taught me is particularly adapted in these maladies, it does not interfere with, or exert any disturbing effect upon the digestion. On the contrary, under its administration, the appetite and the digestion are stimulated in a very satisfactory manner.

"As a rule, during treatment with Pepto-Mangan the improvement in the constitution of the blood, as shown by physical examination, was accompanied by a beneficial effect upon the general condition and strength. The appearance and appetite of the patients improved visibly; the digestion and nutrition progressed favorably, and the patient felt better, happier and more vigorous. Disturbances of the gastro-intestinal tract, such as pressure or pain over the stomach, nausea, a disagreeable feeling of dullness, a diminution of appetite, constipation, congestions, etc., which are so frequent during the administration of other iron preparations, especially those of inorganic character, were scarcely ever observed during the use of Pepto-Mangan (Gude). On the contrary, in those cases in which there is a tendency to constipation, and a marked atony of the gastric functions my experience has led me to regard this remedy as especially useful and effective."—*Editorial, Medical Mirror.*

In those poor victims of a pernicious "pepsin habit" where the stomach instead of being encouraged to do its normal work, has been allowed to become a lazy inactive member while an artificial digestant did the work, I find Seng a boon. Step by step it seems to lead the faltering gastric functions, until before the patient is aware of it, he loses the unhappy knowledge that he has a gastric apparatus. In subsente or chronic digestive disturbances, I know of nothing which equals it.

WILL A. MACKENZIE, M. D.
St. Louis.

I have weighed Peacock's Bromidia in the balance and not found it wanting as a most efficient remedy for the prompt relief of all nervous excitement, epilepsy, uterine and cerebral congestion, hysteria, neurasthenic and, in fact, any convulsive or reflex neurotic derangement. It can be depended upon always.

ALFRED R. SCHOENIG, M. D.
Billings, Me.

The action of Celerina on the brain and nervous system is that of an exhilarant, relieving depressions, and lessening irritable nerve conditions. In cases of organic and functional lesions of the heart, an increased steadiness of pulse beat, and diminution of pulse variation is apparent.

Merit and Reliability With Consequent Success.—We are advised that our old friend, "The Antikamnia Chemical Company," for many years located

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at No. 1723 Olive street, St. Louis, Mo., has moved into its new home, Nos. 1622-1624-1626 Pine street, in said city. The new laboratory is fully equipped with all the latest chemical apliances and machinery, which afford increased and needed capacity for the manufacture of the well-known and reliable Antikamnia preparations. The company's sales during 1902 were the largest in the history of their business, and that the demand for their products is constantly growing, is demonstrated by the fact that the first three months of this year show a pronounced increase of sales over those of the corresponding months of last year. In fact, it is the growth of the business which necessitated the removal into larger quarters, where the company has 75 per cent. more space than in its old plant. The steadily growing esteem in which the Antikamnia Chemical Company's products are held, by the medical profesion throughout the world, is due to the well-known merits of the original Antikamnia Tablets and Powder, as well as to the undoubted remedial efficacy and pharmaceutical excellence of the new combination tablets which this company has, from time to time, added to its line of specialties.

Pain and Its Remedy.—(By J. D. Albright, Philadelphia, Pa.)—Believing that the bar in the way of the profession, in the use of opium, is its tendency to evil after-effects, and the harum-scarum idea that a little opium will induce the habit, and those terrible concomitants (?) I wish to call their attention to a preparation that I have long been using, and have not yet seen one case in which the habit was formed, nor ever had any complaint as to evil after-effects. This remedy is papine, a preparation of opium from which the narcotic and convulsive elements have been removed, rendering it a safe remedy for children, as well as for those of mature age. . . . . Up to a year ago I always gave chlorodyne tablets and viburnum for after-pains. Then I came across a case that refused to yield to them in the time I was accustomed to have them do so, and I concluded to try papine. Its results, to make the story short, were such that I now never give anything else for after-pains, and they yield in about half the time that was required with the above-named remedies.—*Medical Summary.*

"Robinson's Lime Juice and Pepsin" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See page 251, this issue.)

Acetozone in Gastrointestinal Disease.—(By W. F. Drake, M. D., New York.)—Case I.—A. B., 56 years of age, was brought to me suffering from gastrointestinal catarrh and chronic colitis, which had lasted for six years. For a long time he had been treated with high enemas of salol, resorcin, and the like, but without benefit. Finally, I determined to try acetozone, of which I gave him a quantity of the 1-1000 solution after meals, with instructions that the colon should be irrigated daily with normal salt solution. Under this treatment a marked improvement was manifested in a few days; the flatulency disappeared and the patient suffered absolutely no pain. Prior to the exhibition of acetozone his heart's action was very irregular, but it now became perfectly normal. The acetozone treatment was continued for about six months when the patient was discharged. He still continues to use enemas of salt solution,

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once a week, and takes a dose of cascara evacuant as a laxative, occasionally. None of the former distressing symptoms have returned.

Case II.—C. D., 34 years of age, after suffering from acute catarrhal appendicitis, for which the usual treatment of ice bags and high enemas had been employed, made a fairly good recovery. He afterward suffered from intestinal fermentation, accompanied by flatulency, tenderness in the region of the appendix, very irregular heart's action, mitral regurgitation, severe sick headache, foul breath, and a heavily coated tongue. I prescribed 30 drops of cascara evacuant each evening as a laxative, and the acetozone solution after meals. After three months of this treatment the patient was discharged cured.

In the treatment of leucorrhœa vaginitis, gonorrhœa, etc., a most efficient prescription is as follows:

℞ Lue-kre-tol.....3 ii
Hot Water.....Qt. i

Flush the the parts one to three times daily. Send for sample to Luescreton Chemical Co., Winston-Salem, N. C.

Sanmetto in Chronic Cystitis, Chronic Urethritis and Pre-Senile Impotence.—To whom it may concern: This is to certify that I have used Sanmetto extensively in my practice and can recommend it in chronic cystitis and chronic urethritis. I have used it in pre-senile impotence with remarkable and brilliant results. I regard the remedy, after making crucial clinical tests in the above named diseases, as the *sine qua non* of all the remedies in these diseases.

THOMAS M. BROWN, M. D.
Oakland City, Ind.

Sanmetto in Frequent Incontinence in the Aged, in Enuresis Nocturna in Children and in Pre-Senility.—I have had good results from the use of Sanmetto in nocturnal enuresis of children; also have prescribed it in cases of frequent micturition in old people, with marked benefit; also find it beneficial in pre-senility. I think it is a good medicine in all cases where anything of its nature is indivated.

S. W. BADGER, M. D.
Athens, Pa.

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Conclusions Regarding the Efficacy of Acetozone in Typhoid Fever.—Dr. F. G. Harris, resident pathologist of Cook County Hospital in a paper published in the *Therapeutic Gazette* of March, recapitulates, after a study of the drug in the treatment of 128 cases of typhoid in the wards of Cook County Hospital, as follows:

The average stay in the hospital of the 128 patients was 31.04 days.

Of the whole series of 128 cases, 117 made good recoveries, or 91.4 per cent., while 11 died, or 8.59 per cent.

Statistics of the cases of typhoid fever in the hospital not treated with acetozone show a death-rate of approximately 13.1 per cent.

In strict justice to the test—that is, acting in the spirit of this experiment—which was to ascertain the value of the new drug in the treatment of typhoid

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fever, 6 deaths should not be counted for or against the drug. This would change the death-rate of the 123 remaining cases to 4.87 per cent., which will be conceded to be unusually low.

In two years' experience in this hospital I have seldom seen typhoid patients discharged recovered in less than six weeks, whereas under the acetozone treatment many left the hospital recovered in four weeks or less; the average sojourn for the 128 cases being slightly more than twenty-eight days.

The time-honored aphorism, "Typhoid fever must run its course of five or six weeks," did not hold good in this series of cases.

Under the acetozone treatment in favorable cases (seen early) the duration of the disase has been materially shortened, and the most disagreeable symptoms ameliorated.

The typhoid fetor of the stools and the peculiar odor of wards containing typhoid patients are greatly lessened.

The stupor and delirium were very much less, tympanites less frequent, and diarrhœa was checked.

The temperature was reduced; the nurses uniformly commenting on their lightened tasks when caring for typhoid cases under the acetozone treatment.

Forty ounces of the drug was used in the test, being an average of 138.12 grains to each patient.

Many patients were given acetozone very irregularly on account of many contributory causes: dislike of the taste and odor of the solution; resistance of ignorant patients; lack of persistence on the part of overworked attendants, due to the crowded wards caused by the epidemic.

Those patients who are given the drug early, often, and regularly show the best results of this treatment.

What Virchow calls the "brutal force of figures" cannot but convince any one that acetozone lowers the temperature, shortens the duration of the fever, and lessens its toxic symptoms more than our better known treatments.

From the information gained in watching this series of one hundred and twenty-eight cases of typhoid fever, I believe that where cases can be seen during the first week of the illness and given large amounts of acetozone solution regularly and often, assisted by a gentle laxative, the temperature will return to the normal in from ten to twelve days.

An Experimental Research Into the Value of Adrenalin as a Stimulant.—To the Cleveland Medical Journal for December, 1902, Miles and Muhlberg contribute the results of a research upon this very valuable medicament. Keeping in mind the fact that deductions drawn from animal experimentation are valuable only in so far as they are very suggestive when applied to human beings, they draw the following conclusions from their experiments:

1. Adrenalin may be of value in cases of so-called heart failure occurring during anesthesia, especially when the ordinary heart stimulants, such as strychnine, digitalin, and normal saline solution, fail.

2. That it is more likely to succeed in those cases in which the respiratory centers are not paralyzed, since adrenalin does not appear to be a very powerful respiratory stimulant.

3. That when used, it should be given subcutaneously, and the site of the injection should be slowly but strongly massaged until the adrenalin shows its characteristic effect on the pulse.

4. That dilution with normal saline solution (10 per cent, of the 1-1000),

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by making absorption slower, causes a more prolonged and a less energetic rise of the blood-pressure.

5. That while these experiments do not permit them to draw any conclusions in regard to bad after-effects, these were not observed in the animals experimented upon. The danger from secondary hemorrhage as a result of the high pressure must, however, be borne in mind.

6. Adrenalin subcutaneously is indicated on theoretical grounds for the vasomotor collapse following cocaine or chloroform poisoning, and possibly the shock after operation.—*Ther. Gazette.*

Would it not be a wise procedure to use adrenalin with cocaine to shield the patient from the danger of cocaine poisoning?—*Ed.*

Conclusions Regarding the Irrigation Method of Treating Acute Specific Urethritis.—In a paper read before the Philadelphia County Medical Society on February 11th, Prof. Orville Horwitz, after quoting from various authors and his own experience concludes:

"Any one with a mind unbiased who will analyze the testimony offered both for and against the irrigation treatment of acute specific urethritis will; it is believed, feel justified in subscribing to the conclusions which follow:

1. The irrigation method of treatment will not abort acute specific urethritis.

2. It will hasten the terminal stage of the disease, which is prolonged and difficult to cure.

3. Chronic urethritis and involvement of the deep sexual organs are common sequences.

4. In many instances, in order to effect a cure in the terminal stage of the disease, the irrigations must be discontinued and other methods of treatment employed.

5. Irrigation should not be employed in the acute stage of specific urethritis.

6. Irrigation of the deep urethra by means of hydrostatic pressure is injurious in the majority of cases of acute gonorrhœa, and is conducive to the development of complications.

7. Little or no progress has been made in the treatment of acute urethritis either in aborting the disease, lessening its duration, or preventing complication."

Absorbable Ligatures and Sutures.—A perfect material for this purpose is something greatly to be desired. Surgeons, at the present time, have various methods of preparing their favorite materials, but as yet it cannot be said that any one substance or any one plan of preparation has received universal acceptance. On the whole, however, catgut bids fair to eventually supercede the other materials used in surgery as sutures and ligatures. Its chief defects as ordinarily used, are a too ready absorption by the tissues and the want of an ideally perfect method of sterilizing it.

Most careful experiments have recently been made with iodized catgut, and the results of the investigations, extending over a year, seem to indicate that in this method of treating catgut, we have an easy and sure way of rendering the material sterile and at the same time not interfering with its strength or absorbability. Dr. Nicholas Senn, of Chicago, in the *Journal of the American Medical Association*, says of iodozed catgtut:

"It was found that a 1 per cent. aqueous solution of iodin destroys the spores of the anthrax bacillus in eight days. The many experiments made by Clau-

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dius demonstrated that it requires seven days for the complete sterilization of catgut in this solution. He also ascertained that the iodized catgut is not only absolutely sterile, but at the same time strongly antiseptic. Imbedded in a solid nutriment medium infected with pyogenic microbes the iodin contained in the catgut inhibited the growth of germs some distance from the threads.

"The following directions for the iodization are given: The commercial, raw catgut without any preliminary preparation is wound on a glass roll, two strings tied together to each roll. The disinfection is effected by immersion in a 1 per cent. solution of iodin. The solution is made by dissolving one part of iodin and one part of potassic iodid in one hundred parts of water. The solution is prepared by dissolving the potassic iodid in small quantity of water, to which the iodin, finely powdered, is added and the concentrated solution is then diluted to 1 per cent. The solution and catgut are kept in a bottle with a wide mouth, which is closed with an accurately-fitting glass stopper. The date is written on the label of the bottle. After eight days the catgut is ready for use and is preserved in the same bottle and same solution. Before using the catgut it is immersed on the glass roll in a 3 per cent. solution of carbolic acid or an indifferent sterile fluid for the purpose of removing the iodin from the surface of the threads. The threads are cut in the carbolic acid solution as they are needed. The catgut not used during the operation is returned into the bottle, thus doing away with any unnecessary waste of material. Catgut thus prepared is pitch black, soft, pliable and almost as strong as silk. The knots are firm and not liable to slip.

"According to the size of the catgut its removal by absorption takes place in from twelve to sixteen days, being a little more durable than alcohol catgut. It does not irritate the tissues, as the free iodin is soon converted into potassic and sodaic iodid by chemical combinations formed with the salts of the tissue fluids."

It is further claimed for iodized catgut that the iodin is disseminated into the tissues for some distance around the sutures, with the result that stitch abscesses are almost entirely prevented.

The Chief Cause of Sterility.—President Roosevelt has recently created quite a commotion by his letter on the increasing sterility of American women, based upon the presumption that it is chiefly voluntary. This is not true of Roman Catholic and Jewish women—taken as a whole—though it does apply to many Protestants; but the truth is the chief trouble is the alarming, terrible spread of gonorrhea. Any gynecologist of wide experience will corroborate this. *Philadelphia Medical Journal* of January 31, says: "There has occurred of late a marked reaction in the accepted belief as to the etiology of sterility in women. It was formerly the rule to ascribe the larger percentage of sterile marriages to ante flexion of the uterus with accompanying cervical stenosis; to enforced sterility from the use of shields; to some obscure change resulting from the higher education of women; to syphilitic endometritis; and to some sexual incompatibility between the man and the woman. There is not a shadow of doubt that all these, and other factors not mentioned, have a share in the production of sterility in some of its forms. It is now very generally recognized, however, that while "chercher la femme" is an excellent adage for one's guidance in many lines of life, it

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should not overshadow exploration elsewhere in the question of sterility. The extreme importance of gonorrhea in the male in production of sterility is universally admitted; a very perceptible percentage of unfruitful marriages, which are unjustly attributed to some defect on the part of the woman, may be traced to a double epididymitis with hermetic closure of the tubes, or from an obscure affection of the spermatic tubules resulting in the discharge of deformed or effete spermatozoa. But of even more importance than this male sterility, the result of the action of the gonococcus when introduced into the genital tract of the woman, produces such radical changes in the mucous membranes that sterility on the part of the woman is almost certain. The alkaline leukorrhea that results is inimical to the vitality of the spermatozoids, should they be healthy. Again, if the Fallopian tubes be involved in the process, the cilii are quickly shed, and by their absence prevent the ingress of the ovum into the uterine fundus. The activity of the pathogenic process also produces such a tumefaction of the tubal walls that the lumen of the tube is obliterated, and hermetic closure follows from adhesive inflammation. Gonorrhea must therefore be regarded as the most prolific cause of sterility both in the woman and in the man.

Why Should We Not Treat the Gall-Bladder as We Do the Appendix?—Park (*American Medicine*), describes the anatomic and functional resemblance between these two hollow organs, and upon this basis the conclusion which are implied in the title of the case. He speaks, further, of the auto-intoxication which results from a retention of the products or contents of either. He says, furthermore, that the accidents and the diseases of both are in a measure similar; further than this, the symptoms of the two are in a great measure the same. The derangements of the gall-bladder affect the stomach just as those of the appendix affect the cecum. Now, Park reasons that similar treatment applies to diseased conditions in both the gall-bladder the appendix, since the structure, functions, diseases and symptoms are so closely alike in the two instances. He rarely leaves behind a diseased gall-bladder when operating upon the abdomen for any cause whatever. In closing, he describes the diseases of the gall-bladder with much wider limits as far os operation is concerned, than has been the case with most surgeons hitherto.

Indications and Prognosis of the Operations for Rectal Carcinoma.—Jaffe (*Archiv fuer Klinische Chirurgie*) lays particular stress on the fact that the best way to examine a rectal tumor is with the finger, unaided by speculum or other mechanical contrivance. If the growth be very high it may be advisable to introduce the entire hand; but this has its disadvantages and is further not necessary in most cases. In order to get the very best results, the patient should be in the standing position and press down as hard as possible, in which event the examiner can feel a mass which would escape him if any other method of investigation were used. If the anal portion must be removed at the operation, it is helpful to make a transverse incision in the perineum, and from this dissect the anterior wall of the rectum in very much the same way as one does when removing a prostrate. When the tumor is as high as four and one-half cm. above the anal ring, it is possible

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to save the latter and make a circular enterorraphy; but this latter can be done only in case there is no tension on the stitches. Where there is no lymphatic involvement, the permanent results are about twenty per cent. to thirty per cent. of cures, and the mortality about five per cent. to ten per cent. It must be said, however, that the ultimate prognosis in woman is better than in man.

Standard Technics in Operative Surgery.—Dr. Edward Wallace Lee recently read a paper before the New York State Medical Association concerning the advisability of adopting a standard of technics in the performance of surgical operations. We may say at once that we are thoroughly in accord with him when he expresses the opinion that there is far too much diversity of methods in the work that may be seen in various operating rooms, and that if the many procedures now employed could be so sifted down as to leave only the actually valuable, while discarding that which is wrong or even unnecessary, surgery would be greatly benefited. When, however, we consider the prospects for the accomplishment of this desirable end, we feel inclined to doubt that it will ever be realized. We must not forget that while surgery is undoubtedly in many respects a science, it is also an art, and as such belongs to a world in which every hand leaves its own imprint. The technics of a Raphael of a Michael Angelo differed from those of great masters of other schools, and who shall say which were of greater merit? It is the master hand that counts in surgery, as in any other art, and every one to whom has been vouchsafed the genius of operative skill, and the scientific spirit without which it would count for little, will always develop methods of his own, and with them probably obtain better results than would be possible, in his hands, with any others. Perfection is nowhere to be realized upon this earth, and as long as ambitious and progressive men exist, their restless energies will forever lead them to seek improvement. Their hopefulness, perhaps even their vanity, may cause them to think that the most recent offspring of their brain is superior to any other that ever was born. The surgery of one or two centuries ago was not complex in technics, because it was not complex: procedures were few and far between, and their comparative simplicity led to uniformity of performance. We are therefore compelled to acknowledge that while the extreme diversity of our modern methods has many disadvantages, it is the mark of an era wherein the professors of our art are not satisfied to sit in solemn conclave and discuss Galen and Hippocrates; but, on the contrary, are constantly casting off ancient fetters in their onward rush upon the march of improvement, each one often striking a path of his own, but every path reaching towards a common goal. We fear that the adoption of standard operative technics could only be accomplished to the detriment of the spirit of emulation and progress to which modern surgery owes so much.

Spontaneous Rupture of the Uterus During Labor. — Toerngren reports (*Centralblatt fur Gynakologie*) the case of a patient in her eighth labor. She had three normal births, one abortion, and two confinements by forceps. The patient was in spontaneous parturition when she suddenly felt very ill and labor pains ceased. When the pelvis was examined it was found to be considerably contracted and markedly flattened. As

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the patient's dwelling was not clean, she was removed to a hospital. On examination the abdomen was distended and very sensitive and near the umbilicus a portion of the fetus could be felt with unusual plainness. There was a slight discharge of dark fluid blood. It was determined to perform craniotomy, and accordingly the basiotribe was applied and the head extracted without much difficulty. The placenta was found in the abdominal cavity upon the right side of the uterus. The rupture was upon the anterior wall of the womb in the usual location. There was also a tear through the muscular tissue between the lower uterine segment and the thickened portion of the womb. The patient perished of shock within thirty-six hours after the operation. Autopsy showed beginning septic infection as the cause of death.

A New Method of Extracting Foreign Bodies From the Ear.—There is no more delicate and even difficult task, so states the *Medical Press*, than the exraction of a foreign body from the external auditory canal. Irrigation often fails to bring it away, and in certain cases adds to the difficulty by causing the object, a pea for instance, to swell and become more firmly impacted. The employment of instruments is very painful, and requires considerable dexterity, besides supposing an armamentarium specially designed for the purpose, which few general practitioners possess. The recommendation is made of a piece of soft rubber tube, the length of a cigarette, and of the proper size, to be introduced into the ear. The end of the tube is dipped in paraffin and pushed into the canal until it comes in contact with the foreign body, whereon the operator, applying his mouth to the free end, aspirates forcibly, at the same time throwing back his head. Except in cases of angular bodies of irregular contour this method is usually attended by success, the body coming away with the tube.—*Journal American Medical Association.*

Uterine Fibroids Not Dangerous in Pregnancy.—Meheut (*L'Obstet.*, Nov., 1902), has collected 85 cases of pregnancy complicated with uterine fibromyoma in the Baudelocque clinic between 1895 and 1902. In sixty-seven cases pregnancy continued to term (over 78 per cent.), in thirteen it was premature, in three abortion occurred, and in two the pregnancy was interrupted by operations. In only two cases was the fibroid the direct cause of the patient's death. Thus, though a pregnancy complicated by fibroid requires to be well watched, serious accidents are the exception. When the patient's life is threatened operative interference is necessary at once. In all cases the aim is to let the pregnancy advance as near to term as appears safe. Meheut, however, reports that out of eighty-five children, sixty-five left the clinic alive, while twenty (over 23 per cent.) were lost.

Collargolum: The Various Indications for Its Use, the Methods of Its Employment, and the Mechanism of Its Action.—(By Prof. Netter, of the Trousseau Hospital, Paris. Abstracted from the Bulletins et Memoires de la Societe Medicale des Hopitaux de Paris, January 22, 1902.)

Since publishing his first experiences with Collargolum, Prof. Netter has used it in over 130 cases, both in the form of unguentum crede and by intravenous injection. The latter is used when a quick and energetic action is necessary, or when the condition of the

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skin will not permit the absorption of the ointment. The favorable influence of the medication is not always immediately noticeable and in some cases it must be frequently repeated.

Improvement is manifested in various ways. The most constant and most important phenomenon is the change in the general condition. The patient feels stronger, becomes more animated, losing depression and stupor. Many of the typhoid patients sat up in bed spontaneously, showed interest in their surroundings and asked for drink and even food. They looked brighter, the cheeks assumed more color, heartbeats became more regular and the pulse improved in strength. Even when temperature was not modified the disease lost some or the whole of its infective and typhoid character. These changes occurred with extreme rapidity, often almost instantaneously. Temperature fall took place promptly and definitely, though not in every case. The duration of the disease was often abbreviated and quick convalescence followed.

One of the typhoid cases had intestinal hemorrhages on the twentieth day, but recovery took place in spite of them. Another one, treated with Collargolum, had a relapse. Some very bad cases and some in which treatment was begun too late could not be saved.

Prof. Netter has had extremely satisfactory results in nine pneumonias, nine typhoids, fourteen broncho-pneumonias of all kinds, and four severe scarlatinas. In the diphtheria pavilion especially, the treatment has given marvellous results in 37 cases; several malignant cases that seemed necessarily fatal were cured. He was also well pleased with the results obtained in a puerperal infection, in one infectious and in one rheumatic endocarditis. He cannot sufficiently recommend the employment of intravenous collargolum injections in acute endocarditis, from any cause, following Wenckebach. In two cases of pulmonary tuberculosis in the third stage, and in six cases of tubercular meningitis no results were obtained.

Prof. Netter does not entirely attribute the action of Collargolum to its anti-bacterial properties. He believes that its catalytic power is of even greater importance and shows that all the colloidal metals are powerful catalysators. What the modifications of the blood are which the colloidal silver produces, Prof. Netter is not yet prepared to say. Analogy and hypothesis alone are at present available. Experimentation, though surrounded by difficulties, will doubtless furnish direct proofs, and will, he hopes, permit us to markedly enlarge the great field of therapeutic application for Collargolum.

A Partial Programme of the Fiftieth Annual Session of the North Carolina State Medical Society, to be Held at Hot Springs, N. C., Beginning June 2, 1903.—

The President's Address, Dr. A. W. Knox.

The Annual Oration, Dr. Joseph Graham.

The Annual Essay, Dr. E. A. Moye.

The Annual Debate, "Croupous Pneumonia," Dr. A. S. Pendleton, leader.

"The Practical Contributions of Bacteriogy to Medicine," Dr. Arthur R. Guerard.

"The relationship of micro-organisms and human beings in health and disease," Dr. Paul Paquin.

"Post-Operative Pneumonia," Dr. Lawrence E. Holmes.

"A Plea for the Early Recognition of Pleurisy," Dr. T. E. Anderson.

"Problems in the Study of the Etiology and Pathology of Pulmonary

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Calomel and Ipecac, āā 1-10 gr.	Capsicum, ...1-20 gr.
Dover's Powder,.....1-3 gr.	Morphin. Sul.....1-50 gr.
Nux Vomica, ...1-50 gr.	Podophyllin,.....1-40 gr.
	Santonine,.....1-10 gr.

and a list of others quite as valuable.

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Tuberculosis Upon Which Are Based the Early Diagnosis and Treatment of the Disease," Dr. H. B. Weaver.

"Diet in Tuberculosis," Dr. C. P. Ambler.

"Intubation—Its Value—Its Status as a Surgical Resource—Preparation of the Surgeon—Intubation Outfit—Special Points Worthy of Mention—Management of a Patient Wearing an Intubation Tube—Retained Tues—Report of Cases," Dr. J. W. Long.

"Some Observations in Practice on Rheumatism Simulating Chronic Arthritis," Dr. W. W. Whittington.

"Hodgkin's Disease," Dr. W. L. Kirkpatrick.

"Remarks Upon Appendicitis," Dr. F. T. Merriwether.

"A Consideration of Injuries as Seen in Wood-Working Factories," Dr. C. A. Julian.

"The General Practitioner in Relation to Ocular Disease," Dr. H. H. Briggs.

"The Medical Side of Gynaecology," Dr. D. A. Stanton.

"The Surgical Side of Gyneacology," Dr. E. T. Dickerson.

"Man's Responsibility in Sterile Marriages," Dr. W. H. Prioleau.

"Twenty Cases of Peurperal Eclampsia," Dr. L. B. McBrayer.

"A Study of Salpingitis," Dr. H. A. Royster.

"The Perinaeum," Dr. H. S. Lott.

"On the Use of the Private Clinical Laboratory by the General Practitioner, Its Value and Limitations With Practical Suggestions as to Its Equipment and Management," Dr. Chas. Minor.

"The Normal Salt Solution, Its Physiologic Action and Therapeutic Uses," Dr. Geo. P. Edwards.

"Traumatic Occlusion of the Nares—Report of two cases," Dr. K. P. Battle, Jr., Raleigh.

"The Benefits to Be Derived from County Medical Societies," Dr. Albert Anderson, Wilson.

"The Significance of the Recently Discovered Hook-Worm Disease for the North Carolina Practitioner—with Demonstrations," Dr. Chas. Wardell Stiles, M. H. S.

"The Better Organization of the Medical Profession," Dr. J. N. McCormick.

THERAPEUTIC HINTS.

Hemorrhoids.—According to an abstract in the N. Y. *Medical Journal*, hemorrhoids may be so treated medically as to cause no great discomfort, unless they become infected, if the rules of hygiene are properly observed. Sitz baths should be taken frequently. Moderate exercise only should be taken to diminish local congestion, over-indulgence in meat and spiced foods, while vegetables and friuts must be taken freely. The bowels must be regulated, a movement obtained, if possible, just before bedtime, as the hemorrhoids swell greatly after defecation and are reduced during the night. Instead of resorting to the use of drastic purgatives a teaspoonful of the following should be taken at bedtime:

℞ Calcined magnesiæ
Potassii bitartratis
Sacchari lactis, aa ... ℥ss 15

M. Sig.: One teaspoonful at bedtime.

Enemas are of value and may be taken cold. However, the author states that they are preferably taken hot when

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The successful treatment of consumption, scrofula, and wasting diseases generally, is a subject in which every physician is deeply interested. Hydroleine (hydrated oil) simplifies the question to a remarkable degree.

As a food for fat-starved tissues, nothing is equal to cod-liver oil, and Hydroleine is a preparation of the oil which insures its complete assimilation, because it is pre-digested by the use of pancreatine. It is stable, unirritating and free from rancidity, containing only the purest oil preserved by a minute quantity of salicylic acid; and through the agency of soda the pancreatine is protected from neutralization by the acids of the stomach.

In short, Hydroleine is prepared in strict conformity with the true principles of the digestion of fats and is unequaled

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there is no pain, as the decongestive action of heat is more prolonged than that of cold. As an astringent, a teaspoonful of alum may be added to the enema.

The following combination is sometimes recommended internally:

℞	Ext. hamamelidis.....gr. ¾	05
	Ext. capsici aqueous...gr. iss	09

M. Ft. pil. No. i. Sig.: One such pill three or four times a day.

DID YOU EVER ENJOY A MEAL
IN BED?
Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient
in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.
Write for circulars and testimonials.
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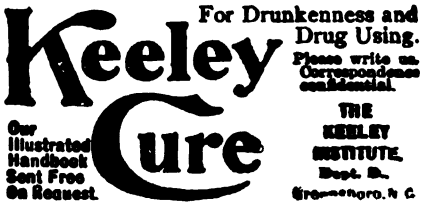
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THE KEELEY INSTITUTE,
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NEURILLA
NERVE CALMATIVE
NERVE HEALTH
follows its use.
Dose: Teaspoonful every half hour until nervousness is abated, then four times a day.
Teething Children 10 to 20 drops.
DAD CHEMICAL COMPANY,
NEW YORK.

When the hemorrhoids protrude externally and are accompanied by pain, a pledget of cotton may be soaked in a 1 per cent. solution of cocaine and applied locally; this will relieve the pain temporarily, but the inflammation must subside before permanent relief can be obtained. Applications of very hot or very cold water are recommended by the author or liquor plumbi subacetatis may be employed or spraying with hot boric acid solution. The anus must be kept clean and only absorbant cotton used in order to produce no irritation.

In cases of internal hemorrhage coming down during defecation and returned with difficulty, the patient should be instructed to lie on his side with the lower thigh extended and the upper one flexed and with a compress soaked in water or olive oil they should be reduced with gentle taxis.

The following combinations are recommended in the form of suppositories:

℞	Ext. krameriæ....gr. viiss	50
	Cocainæ hydrochlor..gr. ⅓	02
	Ol. theobromæ.....ʒi 4	

M. Ft. suppos. No. i. Sig.: One such to be used night and morning to relieve the pain.

Sepsis Following Abortion.—Henry, in *Medical News,* recommends the following outline of treatment of sepsis complicating uterus by means of the finger or sharp curette followed by flushing and thoroughly cleanse the raw surfaces, the cervix, vagina, and vulva. These raw surfaces should then be dried and a 95 per cent. solution of carbolic acid applied to them freely, washing away the surplus with sterile water. No tubes or packing should be left either in the uterus or vagina unless hemorrhage should require it.

According to the author a 2 per cent. carbolized vaginal douche should be

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used twice daily. The bowels should be kept free by the administration of one-half grain (.03) of calomel every hour for four hours, followed by the ordinary dose of salts.

Quinin should be given in three-grain doses (.20) every four hours, alternately with ferric chloride given in fifteen minim doses (1.00) well diluted.

Nourishment consisting of milk, eggs and proper stimulants should be given every four hours.

Eczema.—The following combination is recommended by the *Indian Medical Gazette* in the treatment of eczema:

℞	Acidi borici.....	gr. xxx	2
	Zinci oxidi		
	Amyli tritici, aa..	ʒ vi	24
	Liq. petrolati	ʒ xiii	52

M. Sig.: Apply twice daily with a glass rod. Smear the salve thickly over the affected part and then cover it with a layer of cotton wool and apply a suitable bandage. The parts should be thoroughly cleansed every third or fourth day and a fresh application made. This may be repeated until all signs of inflammation have disappeared.

Chem. Lamoratory Experience.—41144. "Purification by Explosion, or How to become an Angel." Immerse iodine in aqua ammonia. Filter. Dry the precipitate. Then grind the precipitate in mortar with pestle. Write up your notes in the next world.—*Harvard Lampoon.*

Our policy has always been liberal toward our subscribers, but on page 255 you can learn of something unusual, something we are pleased to offer our friends.

Doctor:

If you can use, to advantage, a reliable, cheap, efficient agent in the treatment of Leucorrhoea, etc., send for a sample and literature.

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OBSTETERICS, a text-book for the use of students and practitioners. By J. Whitridge Williams, Professor of Obsteterics, Johns Hopkins Hospital; Gynaecologist to the Union Protestant Infirmary, Baltimore, Md., with eight colored plates and six hundred and thirty illustrations in the text: D. Appleton & Company, New York and London.

This is a handsome volume of some 850 pages, properly illustrated. In it the author has set forth as briefly as is compatable with thoroughness and clearness the science and art of obsteterics. Particular attention is given to fundamental principles, and the reader will find a concise and practical exposition of the normal and pathological anatomy of the female generative tract and the mechanism of labor—a majority of the illustrations are original and will be found peculiarly apt in elucidating the text.

The work is divided into eight sections, taking up in regular order, anatomy, physiology and development of the ovum; physiology of pregnancy; physiology of labor; obsteteric surgery; pathology of pregnancy; pathology of labor, and the pathology of puerperium.

It is impossible in a limited space to give a satisfactory synopsis of each section, but, while all are good, we have been particularly struck with the section upon the physiology of pregnancy and of labor, and the section on obsteteric surgery is worthy of especial attention. The management of the placenta after the delivery of the child is also a portion of the book that should be carefully read by practitioners. The author holds that next to the discovery of asepsis, the modern method of delivering the afterbirth is perhaps the greatest life-saving agency in the art of obsteterics. In this conclusion doubtless a majority of obstreticians will agree with him.

In respect to repair of the prineum after lacerations, a procedure which is carefully described, the author advocates as the most suitable time for placing the stitches, the interval between the birth of the child and the delivery of the placenta. The stitches are of course left untied until after the placenta delivery is accomplished.

In conclusion it may be said that this volume represents the present-day views of the ablest teachers of obsteterics in as clear and practical a manner as can be found in any modern work upon the subject. We can cordially commend it to those desiring a book of this character.

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THE INTERNAL SECRETIONS AND THE PRNICIPLES OF MEDICINE.—By Chas. E. de M. Sajous, M. D. Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society, the Academy of Natural Sciences of Philadelphia, Etc.; Knight of the Legion of Honor and Officer of the Academy of France; Knight of the Order of Leopold of Belgium, Etc.; Formerly Lecturer on Laryngology in Jefferson Medical College and Professor of Laryngology and Dean of the Faculty in the Medico-Chirurgical College; Formerly Professor of Anatomy and Physiology in the Wagner Institute of Science. Volume I., with Forty-two Illustrations. Philadelphia, F. A. Davis Company, Publishers, 1903.

The author, who has long been identified with the "Annual of the Universal Medical Sciences," and more recently with the "Analytical Clyclopædia of Practical Medicine," prefaces this volume by saying it has been his endeavor to follow carefully the development of the various branches of medical science in order that he might finally collate the necessary elements for a more solid foundation than we now possess. This volume is an effort in that direction. While many investigators have sought to elucidate the chemistry of cellular metabolism, still they cannot trace the oxygen through its sojourn in the tissues and only know that sooner or later it comes back combined in carbonic acid (and other matters not now under consideration)." This was wisely said by Foster in 1895. To solve the problem of tissue-respiration, the author turns from the beaten paths to seek a solution on the physiology of the ductless glands. The marked affinity of adrenal extractives for oxygen was first noted; adrenal functions in all vertebrates were found to be similar, hence experimentation on lower animals would give data for study of same in man; by these experiments was learned that the adrenals were the key to tissue respiration as well as to functions of all "ductless glands;" that the heart, lungs, liver, etc., were subsidiary structures which obeyed the mandates of these glands, whose functions heretofore have been unknown. It was further found that red blood corpuscles were secondary factors in the oxygen carrying function, that is, mere carriers, as it were, and that it was the oxygen-laden adrenal secretion dissolved in the plasma itself which carried on all the oxidation processes of the organism.

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Claud Bernard's "ferment in the blood" and Lepines "glycolytic ferment" correspond to the oxygen-laden adrenal secretion (adrenoxin). Thus was seen in a new light many physiological problems among them how oxygen could enter the "minute net work of all cellular elements;" how it combines with myosenogen to generate muscular force, with myelin and forms nerve energy.

From a study of the adrenals the author passes to the anterior and posterior pituitory bodies; the anterior pituitary though once thought useless, is found to be most important organ of the body, because it presides over the adrenals, which control nutrition. Having discovered the great function of adrenals or suprarenals, the author's attention was directed to the other ductless glands. These studies showed the adrenals to be directly connected with the anterior pituitory gland, through the solar plexus, the splanchnic nerves and the cervico —thoracic ganglia of the sympathetic and that this little pea-sized body is one of the most important organs of the human system, because it governs through the adrenals all the oxidation processes of the body. "In general diseases what has been termed the patient's vitality, or "vital resistance," thus became ascribable to fluctuations in the anterior pituitory body's functional efficiency." In other words, over-activity of this organ, by correspondingly enhancing the production of adrenal secretion was found to increase metabolism and activity of functions in proportion; while depression of its normal activity by inhibiting the adrenal secretion and thus reducing the quantity of oxygen distributed throughout the entire organism, proportionately lowered the activity of all vital processes. But what maintains functional activity of the anterior pituitory? This led to consideration of the thyroid gland, which was found to sustain the pituitory by its secretion of iodo-thyrine. This secretion in excess and pro-

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longed gives rise to "exophthalmic goiter;" a reduction of this secretion by inhibiting anterior pituitary produced myxœdema. The adrenal system was thus found united by function and consisted of thyroid gland, anterior pituitary and the adrenals or suprarenal capsules. It was further found that any poison introduced into the circulation had same effect on anterior pituitory as did thyro-iodine; that is, that poisons instead of acting directly on cells or blood either stimulated or depressed the functional activity of adrenal system and thereby the oxidizing power of the plama of blood. Thus change in our belief as to manner of action of general infections or other forms of poisons upon the system is necessitated.

We must consider now that symptoms of infections or poisonings, severe or mild, are signs of over-activity or deficiency of the adrenal system. The author claims the foregoing conclusions have a very inportant bearing upon the prevailing ideas as to the pathogenesis and treatment of the "great scourges of humanity." Asiatic cholera in its symptoms corresponding to symptom-group of adrenal insufficiency and due to effect of cholera toxines upon the anterior pituitary body and the only treatment of avail being active stimulation, which is but using agents which increase the secretion of this gland. Likewise "cholera infantum, arsenic poisoning, various taxalbumins and other intoxications produce identical symptoms and are primarily due to deficient adrenal insufficiency. Pulmonary tuberculosis is a disease due to lowered nutrition, that is, lowered adrenal function, which places system in vulnerable condition for the tubercle bacillus. Then the writer discusses syphilis, pneumonia, tetanus, epilepsy, hydrophobia, septicae-

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mia, eclampsia and kindred disorders from the adrenal view point.

The author then takes up the posterior pituitory body and finds it to be the "chief function centre of the nervous system," and the co-center of the anterior body, and in this connection discusses all forms of shock and the part this gland plays in influenza, hay fever, hysteria and catalepsy. The author next discusses the functions of the lencocytes and finds them to be chiefly the oxygenators of the tissues and the red blood corpuscles are only carriers. Next is considered the pancreatic secretion and its relation to the pituitory gland and to the blood corpuscles and finally its bearing on minimizing medicine. The author does claim that position he has assumed in the discussion of the internal secretion is invulnerable, but that he has opened up a broad field for study and that eventually the great science of medicine will be laid on a more accurate basis. This volume is one of the most original contributions to medicine which has appeared in recent years, and we look forward to the publication of a second, which will consider special pharmacodynamics and physiological pathology in the light of this new research.

THE PRACTICAL TREATMENT OF STAMMERING AND STUTTERING.—With Suggestions for Practice and Healthful Exercise. By George Andrew Lewis. With a Treatise on the Cultivation of the Voice, by George B. Hynson, M. A. Detroit, George Andrew Lewis, 1902.

The object of this book is well described in its preface. The authors have been particularly interested for a long time in studying human speech and its defects, and they have now prepared a book in which they deal with the classification and characteristics of stammering and stuttering, and the treatment which they think should be instituted for the relief of patients who suffer from these difficulties of speech. The first 166 pages of the book deal with these defects, and the last half of the book deals with the cultivation of the voice, and with exercises which are designed to enable the individual to practice the proper use of his vocal apparatus. The volume insists wisely upon the fact that no pupil can gain all the necessary advantages from the mere reading and instruction which he obtains in any volume, be it written never so well. In the vast majority of instances it is absolutely necessary that the personal element of the teacher should be exercised in order that complete control of the patient and his methods of speech be attained. This seems to us the most sane and sensible method of treating stammering which we have seen exploited for a long time.

Book Review—

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION.—By Prof. Dr. Carl von Noorden, Physician in Chief to the City Hospital, Frankfurt a M. Authorized American Edition Translated under the Direction of Boardman Reed, M. D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part III, Membranous Catarrh of the Intestines (Colica Mucosa), by Prof. Dr. Carl von Noorden, with the Collaboration of Dr. Carl Draper. New York, E. B. Treat & Co., 1903.

This little volume on mucous clititis is one of a series of monograms on dis-

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eases of metabolism and nutrition which will appear simultaneously in New York and Boston. This plan of publication is a commendable one, and will, no doubt, receive the approval of the medical profession, particularly those who are not conversant with the German language. The plan of treating membranous colitis on a systematized coarse diet does not receive the approbation of all German authorities (notably Boas), still the markedly successful results obtained by the author would warrant its trial in this most obstinate affection. The pathology of this disease is carefully considered and the book is a valuable contribution to the literature of this subject.

The *Home-Maker* is the significant and appropriate title of a new magazine edited by Mrs. Emma F. A. Drake, M. D. It is a home magazine, dealing with the problem of parents and children,

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along lines of right-thinking and living. Dr. Drake is the author of several books. Her book to young wives secured her a prize of one thousand dollars from the Vir Publishing Company, of Philadelphia, but beside her distinction as an author, she presides as wife and mother in a beautiful Christian home. The *Mome-Maker* is $1.00 a year and is published at Denver, Colorado.

Hyperchlorhydia, a Symposium.—The June issue of the *International Medical Magazine* will be devoted to a symposium on this most important gastric subject, than which none more important has ever been published in any American journal. More than half a dozen of the leading European specialists will contribute, among whom are: Prof. C. A. Swald, Berlin; Prof. Geo. Haymen, of Paris; Prof. Carl von Noorden, of Frankford; Dr. L. Kuttner, of Berlin; Prof. Rosenheim, of Berlin.

The selection of contributors from this side of the Atlantic has been equally happy, and the following will take part:

Prof. John C. Hemmeter, of Philadelphia, on "An Experimental and Clinical Study of the Etiology of Hyperchlorhydria."

Dr. Allen A. Jones, of Buffalo, on "The Effervescence Test for Gastric Acidity."

Dr. Boardman Reed, of Philadelphia, on "A Further Development of the Benedict Effervescent Test of Gastric Acidity."

Dr. John A. Lichty, of Pittsburg, on "The Relation Between Hyperchlorhydria and Neurasthenia."

Prof. Frenton B. Turck, of Chicago, on "The Treatment of Hyperchlorhydria."

Dr. A. Robin, of Newark, Delaware, on "The Etiology of Hyperchlorhydria."

Dr. Max Einhorn, and others.

We invite the attention of all our subscribers to a proposition made on page 255 of this issue.

MEDICAL NEWS AND ITEMS.

The meeting of the North Carolina Medical Society in Hot Springs on June 2d promises to be an enjoyable and profitable occasion. The mountains will then be at their best so far as beauty is concerned, and the season far enough advanced for the cool nights to be a treat to the deizens of the lower country. A very attractive programme is already booked (see elsewhere) and many other papers will yet come in. Send the title of your paper to the Secretary, Dr. J. Howell Way, Waynesville, N. C., and it will appear on the official programme.

Doctors: Don't forget to put an extra dollar in your pocket for the CAROLINA MEDICAL JOURNAL when you start to Hot Springs.

Newly Elected Officers of the American Medical Association.—President, Dr. J. H. Musser, of Philadelphia; first vice president, Dr. G. C. Savage, Tennessee; second vice president, Dr. Isadore Dyer, of New Orleans; third vice president, Dr. C. L. Hall, of Missouri;

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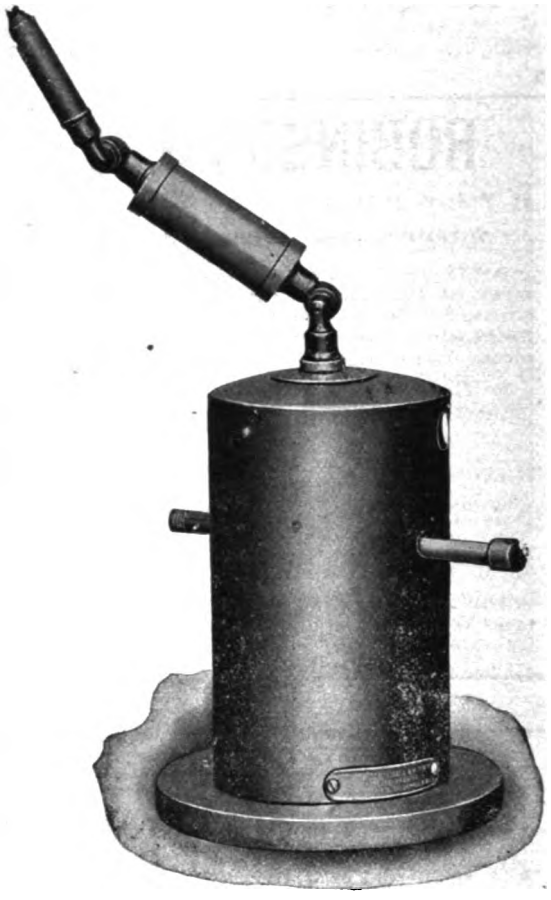

fourth vice president, Dr. G. F. Jenkins, of Iowa; treasurer, Dr. Henry P. Newman, of Chicago; secretary, Dr. George H. Simmons, of Chicago. Dr. F. H. Wiggin, of New York, G. B. Gillespie, of Tennessee, and D. C. Peyton, of Indianapolis, were re-elected members of the judicial council. Dr. W. J. Mayo, of Minnesota, was elected orator on surgery, and Dr. H. M. Biggs, of New York, orator on state medicine. The new business committee is made up of Edwin Walker, of Indiana, chairman; A. R. Craig, of Pennsylvania; G. M. Kober, District of Columbia; T. J. Murray, Montana, and William Davis, Minnesota. It transpired that Dr. Musser, who was elected president, had left the city yesterday, and could not be installed. After considerable discussion it was decided that Dr. Musser be installed at the opening of the next annual meeting, and that the constitution be amended to continue him in office until then. The present president, Dr. Billings, of Chicago, will hold over until the annual meeting in Atlantic City, in 1904.

Texas has passed a bill compelling the railroads to disinfect their coaches. A *long* step in the *right* direction.

The Illinois School of Electro-Therapeutics, upon the entry of its fifth year of work in Chicago, goes into their elegant new quarters at 35 E. Randolph street, where they have abundance of space and seating capacity to meet the increased demand made upon them for

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We are indebted to the *Medical Age* for many of these notes.

There are 186 women physicians in Philadelphia.

The plague has disappeared from Mazatian, Mexico.

Harvard is to have new medical buildings, costing $2,000,000, of which J. P. Morgan contributes one-half.

California swings into line, a bill having been passed for the regulation of the practice of medicine in that State.

The present epidemic of cholera in the Philippines numbers over 125,000 reported cases.

The Mexican government proposes to grant an annual appropriation to the Liverpool School of Tropical Medicine.

Charbon Attacks Human Beings in Louisiana.—In the parish of Acadia, Louisiana, some 225 head of cattle have died recently from charbon. The farmers, ignorant of the infectious nature of the disease, skinned some of the dead animals and sold their skins. As a result thirteen human beings have contracted charbon. The police jury of Arcadia has been called together to take steps to stamp out the disease.

Medical Practice Act for New Jersey.—The State Board of Medical Examiners of New Jersey has secured amendments to the Medical Practice Act of that State by which the academic standards for admission to the State examinations have been raised from a competent common-school education to a diploma issued after four years of study in a normal, manual training, or

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high school of the first grade in that State, or its equivalent. The medical requirements have been increased from three to four courses of medical lectures of at least seven months each, in different calendar years, prior to receiving the degree of Doctor of Medicine. The amendments go into effect on July 4th next. After that date candidates for examination, or for the endorsement of a license issued by a recognized examining board of another State, will be obliged to comply with the new standard of requirements for a New Jersey license.

One of the most difficult problems in dealing with tuberculosis among the poor is undoubtedly the supply of suitable and sufficient food. This question has been grappled with by an organization for the improvement of the condition of poor sufferers from tuberculosis which has recently been formed by some ladies among the "leaders of society" at Cambridge, Massachusetts. In order to make the work practical all the medical practitioners in the city have been asked to co-operate with the organization by sending to the members designated the names of those who lack the means to provide themselves wholesome and nutritious food. The dietary which the practitioner prescribes will be indicated by a diet card, and this food will be supplied at the expense of the organization. The organization will also be aided by district nurses, who will visit the patients in their homes. It is intended that the work of the organization shall be educational as well as remedial.

Lectures for train men, to be given by Jefferson Medical College, will soon be begun, both the Pennsylvania and Reading Railroad companies having agreed to permit their employes to attend the lectures.

Dr. Frederick Mueller, the assistant of Prof. Lorenz, has returned to this country, and will take up his residence in Chicago, where he is to have charge of a hospital devoted especially to orthopedic surgery.

On March 12 news was transmitted to the Bureau of Animal Industry, Washington, from Boston, stating that four herds of cattle, aggregating sixty-three animals, had been found near Bedford, N. H., affected by foot-and-mouth disease, and had been slaughtered.

Official statistics recently published show a great diminution in tuberculosis mortality in the Prussian States between the years 1876 and 1901. In 1876 the death rate from tuberculosis was 31 per 10,000 of population; in 1891 it was 27; in 1896, 22; in 1901 it was 20.

The death of Prof. Panas, of the University of Paris, has deprived the profession of a distinguished ophthalmologist. Professor Panas was a Greek by race, a British subject by nativity, having been born in the Ionian Islands while they belonged to Britain, and a Frenchman by adoption.

A traveling graduate medical school, to visit all the cities of sufficient size and have clinics and lectures by eminent men, is proposed in Germany. The practitioners in the surrounding territory would thus gather for a week or two once a year in their nearest town. —*Jour. of the Amer. Med. Association.*

The Board of Health of Rockford, Illinois, having come to the conclusion that cats are largely responsible for the spread of contagious and infectious diseases, has issued an order that all cats living in the houses in which there are cases of scarlet fever, diphptheria, or other contagious diseases shall be put to death.

It is stated that Prof. Behring, the discoverer of anti-diphtheritic serum,

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CAROLINA MEDICAL JOURNAL, CHARLOTTE, N. C.

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has announced the discovery of a serum by means of which calves can be made perfectly immune to tuberculosis, and which he believes will be equally applicable to human beings.

A new drug laboratory has recently been established in the Chemical Bureau at Washington, with the object of investigating adulterations, testing drugs, and establishing uniformity in the standard of medical substances for future State and National legislation. The American Pharmaceutical Association has passed resolutions approving of the new bureau. Mr. L. F. Kobler, of Philadelphia, has been appointed director.

It is asserted that several physicians and a number of associations in Berlin will test the value of sea air in a number of patients suffering from tuberculosis. As ordinary steamers, owing to the noise, unpleasant smells, and want of proper accommodations, are unsuitable, it is proposed to build a large floating sanatorium with roomy, open-air wards, medical supervision, and a complete equipment for scientifically testing the effects of the sea air. The cruising ground is to be the northeastern Atlantic, in the neighborhood of the Canary Islands. Should success attend the effort, further floating sanitoriums will be built. The voyages will, according to *American Medicine,* last about six weeks.

Discovery of a Plant Which Drives Away Mosquitoes.—In certain parts of West Africa the knowledge has long been prevalent among the natives of the existence of a certain species of plant which, if placed in a room, will drive away all mosquitoes. An English medical officer has been making investigations, and has found that the natives in Lakoja make use of this plant to protect themselves from the swarms of mosquitoes. Captain Larymore sent specimens of the plant to England for identification, and experts found it to be *Ocimun virile* Willd. It is a member of the order Labiatæ, which grows from Senegambia southward to Angola. Capt. Larymore found that the presence of these plants in a room undoubtedly drove mosquitoes out, and by placing three or four around his bed at night he was able to sleep unmolested without using the mosquito net. If this plant can be successfully grown away from its native soil, it will prove a boon to people living in localities which swarm with mosquitoes during the summer months.

A Step in Advance.—Spain is scarcely the country to which one would look for any great progressive movement, yet she has recently initiated a reform which is entirely in harmony with advanced notions in state medicine. Finding that the asylums and eleemosynary institutions were being filled with needy degenerates, from purely economical motives, the Spanish government has insisted upon medical sanction as indispensable to the marriage contract. It is hoped in this way to provide some check upon the increasing production of indigent, needy, and insane. The step is a rational one, and will doubtless commend itself to other nations in time.—*Medical Age.*

Dr. W. H. Baldwin (*Alk. Clinic*) has found that when all other foods have given out, in a case of typhoid fever, ice cream will be gratefully received by the patient longer than any other nourishment, and he has never seen any bad results; on the contrary, it does good, is well borne and at times appeared to modify the disease It should be home made, with plenty of rich cream and

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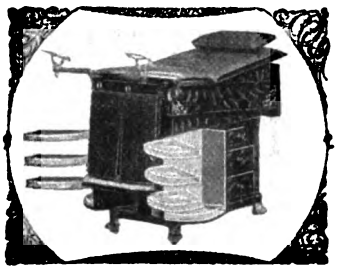

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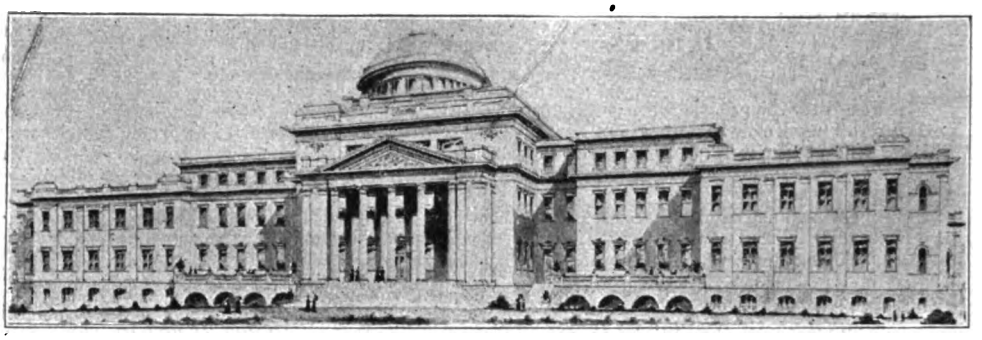

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More Work for Niagara.—Another draft is to be made upon the gigantic working power of Niagara Falls. On the Canadian side, in the Victoria Park, a new power plant is under construction. Its first section, now being built, will provide 50,000 horse power, by means of five generators of 10,000 horse-power each. This is twice the capacity of the separate generators now used on the New York side. By increasing the size of the generators, it is found that the cost per horse-power is lowered. By means of cables, the New York and the Canadian plants will be connected for parallel operation.

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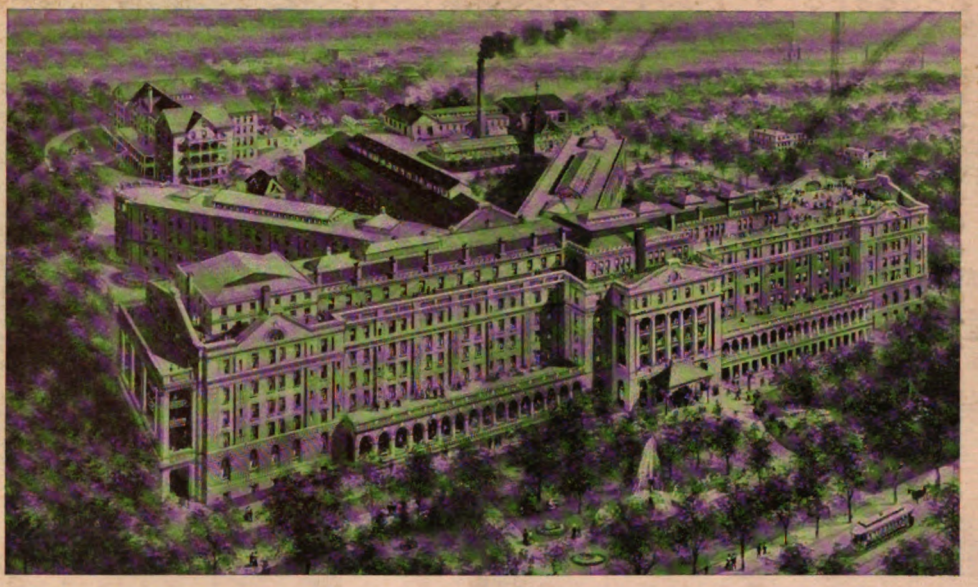

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